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ABSTRACT

This issue of the Navajo Language Review consists of five papers. The first, by E. Perkins, deals with the semantics and syntax of the Navajo negation particle "hanii." In the second paper, S. Billison speaks of the need to preserve the Navajo language and culture through bilingual education programs. M. Saville-Troike studies variation and change in Southwestern Athabaskan and makes suggestions for further data collection and analysis. The fourth paper is presented first in Navaho then in English. The authors, K. Hale and L. Honie, discuss language comparisons and related languages. The final paper presents an analysis of the uses of the Navajo classifier inductively in the form of a dialogue between two friends (to be continued in the next issue). (PMP)

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NAVAJO LANGUAGE REVIEW

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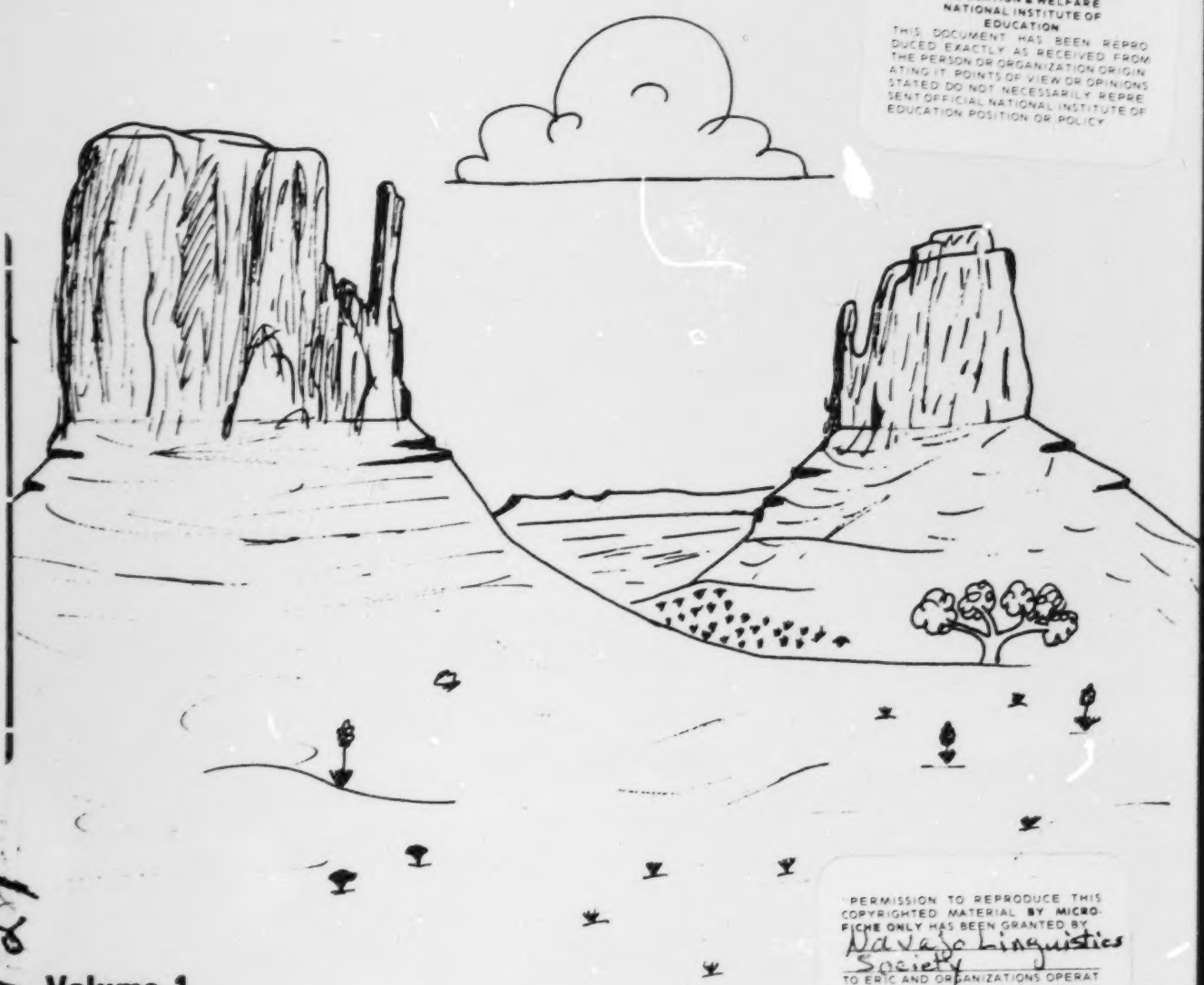

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THE NAVAJO PARTICLE OF CONSTITUENT NEGATION

ELLAVINA PERKINS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

This paper is concerned with the semantics and syntax of the Navajo negation particle /hanii/.

The semantic effect of /hanii/ is to deny an identification. The element whose identification is denied is represented by the constituent which immediately precedes it--at least this is the case in simple sentences. That is, in simple sentences, /hanii/ will immediately follow the constituent which represents the disputed identification. The use of the particle /hanii/ in Navajo is illustrated in the sentences below. Consider first sentences (1) and (2): in (1), we have omitted the negation particle, and in (2), we have the same sentence with the negation particle /hanii/.

(1) Ma'ii yiiɮtsą́.
(coyote I-saw)
'I saw the/a coyote.'

(2) Ma'ii <u>hanii</u> yiiɮtsą́.
(coyote hanii I-saw)
'It wasn't a coyote that I saw.' or 'I didn't see a COYOTE.'

Sentence (2) can be rendered in English with clefting as in:

'It wasn't a coyote that I saw.'

or with extra stress on coyote as in:

'I didn't see a COYOTE.'

This paper was presented at the XIIth Conference on American Indian Languages held in conjunction with the annual meetings of the American Anthropological Association in New Orleans in 1973.

(3) Ma'ii hanii yiiztsą, dlǫǫ' ga'.
(coyote hanii I-saw, prairie-dog ga')
'It wasn't a coyote that I saw, but a prairie dog.' or
'I didn't see a COYOTE, I saw a prairie dog.'

In Navajo there is another negating element besides /hanii/, and that is /doo...da/. Both /hanii/ and /doo...da/ are negating devices; however, they are not the same. /Doo...da/ is different from /hanii/ with respect to presupposition. What /doo...da/ does is merely assert that something is not true. And what /hanii/ does is deny an identification in contrast to a correct identification. For example, contrast sentences (4) and (5):

(4) Jáan doo chidí yiyíízchǫ'da.
(John neg car wrecked neg)
'John did not wreck the car.'

(5) Jáan hanii chidí yiyíízchǫ'.
(John hanii car wrecked)
'It wasn't John who wrecked the car.' or 'JOHN didn't wreck the car.'

The effect of /hanii/ can be understood most clearly by adding a tag which the speaker claims to be the correct identification. Consider, for example, sentence (6):

(6) Jáan hanii chidí yiyíízchǫ', Mary ga'.
(John hanii car wrecked, Mary ga')
'It wasn't JOHN who wrecked the car, but MARY.' or
'JOHN didn't wreck the car, MARY did.'

Notice that the constituent /Jáan/ is being contrasted with another item /Mary/. That is, /hanii/ immediately follows the disputed identification and the emphatic particle /ga'/ immediately follows the element representing the corrected indentification. It should be clear now--that with /hanii/ the disputed identification is always paired with a corrected identification: (X hanii) (Y ga'). Its presence is always implied by /hanii/; although, it may not appear in the sentence. So, in sentence (2), some contrasting identification is implied--as in (3).

On the other hand, what /doo...da/ does is embrace the string it n[illegible]es by its two subparts as in (4). This is all I want to point out about /doo...da/ since our concern is /hanii/--which I will now attempt to define.

As you will note, there are two things being said in (2):

'I saw X.' and 'X is not ma'ii.'

What seems to happen is that the particle /hanii/ semantically partitions simple sentences into two parts: (a) focus and (b) presupposition. The first part; namely, the focus, is the constituent immediately preceding /hanii/; and the latter, that is, the presupposition, can be derived by replacing /hanii/ and its focus by a variable X. What /hanii/ does when it denies a particular identification is create a presupposition by focusing on the constituent that immediately precedes it. In sentence (5), the semantic effect of /hanii/ is to deny that the wrecker of the car is to be identified as /Jáan/. Notice that /hanii/ does not only deny a particular identificat[illegible], but partitions the sentence into a focus and a presupposition. The presupposition in any such sentence can be found by sustituting a variable for the sequence consisting of /hanii/ and the constituent that immediately precedes it. The presupposition in (5) is illustrated as (7):

(7) Jáan hanii chidí yiyíłchǫ'.
X

X chidí yiyíłchǫ'.
'X wrecked the car.' or in an actual Navajo form:

(7') Chidí yilchǫ'.
'The car got wrecked (by someone).'

Having defined the presupposition in /hanii/-sentences, we now turn to the notion of focus. The focus of /hanii/ is the constituent immediately before it--i.e., the focus of /hanii/ in (5) is /Jáan/-the NP before /hanii/. So far, in simple sentences, the focus of /hanii/ is also the constituent which represents the disputed identification. We can formalize the observation that the focus is the constituent before /hanii/ as in (8):

(8)

X	A	hanii	Y
1	2	3	4
1	2 [focus]	3	4

This is merely our formal expression of the claim that the focus of /hanii/ always immediately precedes it. This means that /hanii/ must have a constituent preceding it in order to have a focus. The focus in any /hanii/-sentence can be altered by moving /hanii/ around, for example, in cases where there are more than one noun phrase in a particular sentence. This is illustrated in the following sentence:

(9) Jáan ɣɬɬ' tl'66ɣ yee yizloh.
(John horse rope by-means-of lassoed)
'John roped the horse with a rope.'

in which there are three possible noun phrases that /hanii/ could attach to. Consider first /Jáan/ as the focus:

(9a) Jáan hanii ɣɬɬ' tl'66ɣ yee yizloh.
(John hanii horse rope by-means-of lassoed)
'It wasn't John who roped the horse with a rope.' or
'JOHN didn't rope the horse with a rope.'

Next consider /ɣɬɬ'/ as the focus

(9b) Jáan ɣɬɬ' hanii tl'66ɣ yee yizloh.
(John horse hanii rope by-means-of lassoed)
'John didn't rope the HORSE with a rope.'

And thirdly consider /tl'66ɣ/ as the focus in the following sentence:

(9c) Jáan ɣɬɬ' tl'66ɣ hanii yee yizloh.
(John horse rope hanii by-means-of lassoed)
'It wasn't a rope that John roped the horse with.' or
'John didn't rope the horse with a ROPE.'

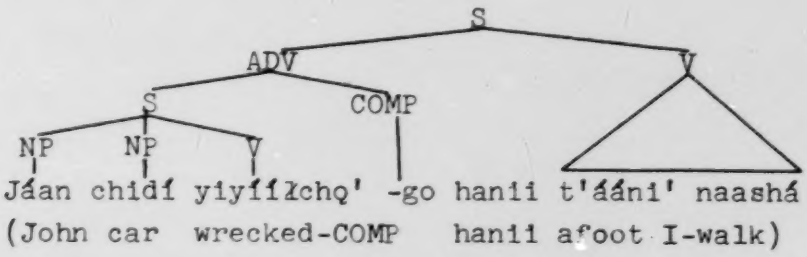
It is clear from the above sentences that the focus of /hanii/ is the constituent immediately preceding it and that and NP can be the focus in longer sentences as we have illustrated in (9).

We have, so far, observed the behavior of /hanii/ in simple sentences. Let us now consider the behavior of /hanii/ in complex sentences. Consider, for example, sentence (10) in which /hanii/ is attached to the end of the embedded sentence.

(10) Jáan chidí yiyíízchǫ'go hanii t'áání' naashá.
(John car wrecked-COMP hanii afoot I-walk)
'It's not because John wrecked the car that I'm on foot.'

Remember that in simple sentences /hanii/ attaches to the constituent immediately preceding it. That is, the constituent to which it attaches is its focus. It seems that /hanii/ behaves the same in complex sentences with respect to focus--that is, the focus of /hanii/ is still the constituent it immediately follows, but as you can see in the structural description in (11), the focus of /hanii/ is the adverbial clause:

(11)



This can be shown by the fact that (10) can be followed by a tag giving the corrected identification and that the corrected identification is a complex adverbial clause parallel to the one preceding /hanii/. Thus, consider the following sentence in (12):

(12) Jáan chidí yiyíízchǫ'go hanii t'áání' naashá, bimá chidítsoh ayíízbąązgo ga'.
(John car wrecked-COMP hanii afoot I-walk, his-mother truck drove-off-COMP ga')
'The reason I'm on foot is not because John wrecked the car, but because his mother drove off the truck.

In sentence (12), the entire clause

Jáan chidí yiyíízchǫ'go
'because John wrecked the car'

is being contrasted with another clause:

bimá chidítsoh ayíízbą́ązgo
'because his mother drove off the truck.'

The latter is offered as the correct reason for the main assertion; namely, that the speaker is on foot--expressed by /t'áání' naashá/. We have observed /hanii/ attached to a complex constituent in the complex sentence (10) and we have seen that it behaves the same as in simple sentences.

Now let us see what happens when /hanii/ is inside the embedded clause in (10). That is to say, let us observe the behavior of /hanii/ when it is attached to a constituent which is located within an embedded sentence. Consider sentence (13) below:

(13) Jáan hanii chidí yiyíízchǫ'go t'áání' naashá.
(John hanii car wrecked-COMP afoot I-walk)
'It's not because JOHN wrecked the car that I'm on foot.'

If we consider only the presupposition of (13), it doesn't change. That is, the presupposition in both (10) and (13) is that the speaker is on foot for some reason. The procedure identifying the presupposition outlined in (7) will work correctly when applied to (10). Consider (14):

(14) Jáan chidí yiyíízchǫ'go hanii, t'áání' naashá.
X

in which the presupposition is:

X-go t'áání' naashá.
(X-COMP afoot I-walk

In sentence (13), this simple procedure will not work. It happens that the presupposition of (13) is the same as that of (10). The sentences differ not in presupposition, but in focus. Thus, in (10), the focus is the entire adverbial clause. While in (13), the focus is the noun phrase /Jáan/. It appears, therefore, that we must distinquish two semantic notions with respect to /hanii/. Let us call them contrastive focus and semantic focus. Let us use the term contrastive focus to refer to the contrastive

aspect of /hanii/, and let us use the term semantic focus to refer to the particular semantic effect of the particle--namely, the effect of denying an identification.

In simple sentences, they are identical. In sentence (2), for example, the NP /ma'ii/ 'coyote' represents the disputed identification and also is directly contrasted with some other NP which is implicit in (2) but explicit in (3).

In complex sentences, on the other hand, it is not always the case that they are identical. They are identical in (10)--thus, the semantic focus of /hanii/ is the adverbial clause, since that represents the element whose identification is being denied. And the contrastive focus of /hanii/ in (10) is also the adverbial clause--since, it is the adverbial clause as a whole which is being contrasted implicitly with some other element. When this contrasting element is made explicit, as in (12), it proves to be an adverbial clause also. Now consider sentence (13). In (13), the semantic focus of /hanii/ is also the adverbial--thus, the speaker is denying that the reason for his/her being on foot is to identify with the proposition: /Jáan chidí yiyíízchǫ'/ 'John wrecked the car.'

However, (13) differs from (10) in that the contrastive focus in (13) is not the adverbial as a whole, but rather the NP /Jáan/ located in the embedded clause. That is, it is the NP /Jáan/ which is being contrasted with some other entity. When this contrasting entity is made explicit, it proves to be represented by a simple NP, /Mary/ as in (15) which follows:

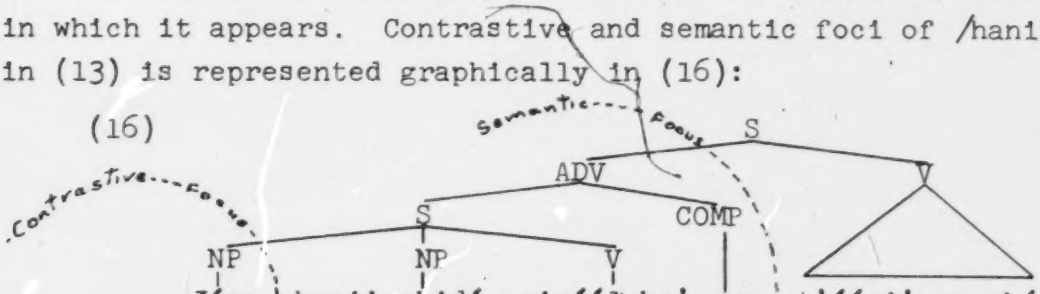
(15) Jáan hanii chidí yiyíízchǫ'go t'áání naashá, Mary ga' (chidí yiyíízchǫ'go).
(John hanii car wrecked-COMP afoot I-walk, Mary ga' (car wrecked-COMP)
'It's not because JOHN wrecked the car that I'm on foot but because Mary did (wrecked the car).'

So while adverbials are being contrasted in (12), NPs are being contrasted in (15). But in both (10) and (13), the semantic focus of the denial-of-identification is the entire adverbial.

It appears that the syntax and semantics of /hanii/ are not always in agreement--that is, while the semantic focus of /hanii/ is typically assigned to the constituent immediately preceding it--and there are times when it is not--the contrastive focus of /hanii/ is apparently always in agreement with its syntactic position, that is, it's contrastive focus is the constituent immediately to its left.

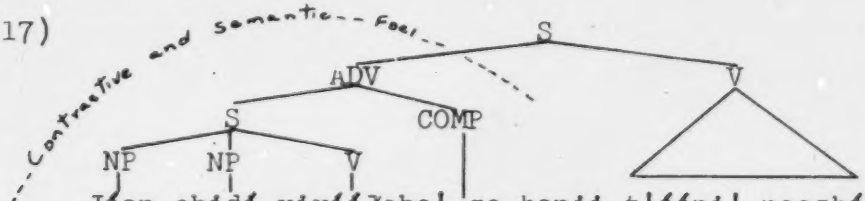
These observations suggest the following principles of interpretation for /hanii/: First, the contrastive focus of /hanii/ is regularly the constituent that immediately precedes it. Second, the semantic focus of /hanii/ can be identified as follows: If /hanii/ is located within an embedded clause (as it is in (13)), then, with respect to semantic focus, it acts as if it were attached to the constituent which dominates the sentence in which it appears. Contrastive and semantic foci of /hanii/ in (13) is represented graphically in (16):

(16)



If /hanii/ is not in an embedded sentence, that is, if it is in the root clause, then its semantic focus is the same as its contrastive focus. This is true of the contrastive and semantic foci of /hanii/ in the case of (10), which can be represented graphically as (17):

(17)



The principle for interpreting /hanii/ may be expressed roughly as in (18) and (19).

(18) Contrastive Focus Assignment
The contrastive focus of /hanii/ is the constituent immediately preceding it.

(19) Semantic Focus Assignment
(a) If /hanii/ appears within an embedded clause, then its semantic focus is the constituent which dominates the sentence in which it appears.
(b) If /hanii/ appears in a root clause, its semantic focus is the constituent immediately preceding it.

The semantic focus assignment rules or principles make a certain prediction about the meaning of /hanii/ in relation to its syntactic position. Consider its position in sentence (5):

(5) Jáan hanii chidí yiyíłchǫ'.
(John hanii car wrecked)

Notice that the semantic focus of /hanii/ is the same as its contrastive focus. Thus, it is the identification /Jáan/ that is being denied. This implies that John did not wreck the car--thus, if John did in fact, wreck the car, then sentence (5) would be untrue. However, notice that the embedded clause of (13) is identical to (16). But according to our interpretation principles, the semantic focus of /hanii/ in (13) is not /Jáan/. If this is correct, then (13) would remain true, even if John did wreck the car. This in turn, would provide evidence in favor of our analysis of the semantic focus of /hanii/. The correctness of this analysis is suggested by the well-formedness of the following dialogue:

(20) Q: T'áání' naninaala'. Da' Jáanísh chidí yiyíłchǫ'.
A: Aoo'. Jáan nídeezidídą́ą́' chidí yiyíłchǫ', ákondi Jáan hanii chidí yiyíłchǫ'go t'áání' naashá. Mary ga' damóoyę́ędą́ą́' yiyíłchǫ'go t'áání' naashá.
'Yes. John did wreck the car last month, but

it's not because JOHN wrecked the car that I'm on foot, but because MARY wrecked it last week that I'm on foot.'

t áá ákódí

THE VALUE OF LANGUAGE AND CULTURE IN THE NAVAJO SOCIETY

SAM BILLISON
KINLICHEE SCHOOL

The Navajo Tribe is a pluralistic society; most of us go from the Navajo world to the non-Navajo world not by choice, but because of the pressure from the dominant society.

Our language and culture are the primary vehicle which the child uses to form a bond between his past and his future. His language stays with him and his culture adapts other forms through perceptions of cultures.

The ability to communicate is the ability to learn as when a newborn infant slowly discovers himself, his hands, feet, and face. He communicates his pleasures and displeasures in the few ways possible, such as crying or smiling. This is the start of the child's self-awareness and is most definitely a form of communication. The child then becomes aware of and is able to understand the sounds which those around him use and consequently, he begins to learn about those other things around him. The parental bonds begin to develop and likewise the sibling bonds. The child soon is able to take the sounds it learns and begins to put them together in patterns, forming words, sentences, and conveying personal desires.

The Navajo child, like any child, learns to be confident in those around him. The dress, language, food, housing, customs of his family, and his people support this confidence. If the child is Navajo, and he lives on the reservation among Navajo parents and kin, he will unmistakenly KNOW THE NAVAJO WORLD FIRST.

This paper was presented at the annual Diné Bi'ólta' Association Conference held in Tsaile, Arizona, in October, 1973. A Navajo version (of which this is a condensed and translated form) was given. [For a discussion of DBA, see Editor's note on page 66].

Many of us were never exposed to the expectations of a dominant society until we were six years of age, but today this is changing very fast. Young Navajos are exposed via television and other modern conveniences immediately to this expectation on non-conformity as perceived by the dominant society's media. As the child develops awareness, he will see the non-Navajo world--perhaps he might not understand, but will be forced into accepting and adapting the language and culture of the dominant society. He will become torn between the unresolved conflicts imposed by the imposition of one society's views upon the other. He will see those around him facing the same conflicts, especially the youth.

Suddenly, today we are aware that many of our youth are losing their mother language and culture and it is very heartening that organizations like DBA are taking it upon themselves to organize and advocate bilingual education throughout schools as they are in the present conference. I specifically appreciate that under the leadership of Mr. Dillon Platero, this bilingual conference is encouraging involvement. When the child enters school, he is entering a non-Navajo environment--it threatens him momentarily and perhaps permanently when he is unable to speak the language of his tutors. This conflict between worlds increases. He begins to feel very uncomfortable and perhaps to some extent a feeling of "unwantedness" develops.

Unless the existing educational systems begins to resolve this, the conflict will continue and the lack of meaningful education in the native Navajo language and culture will leave the child suspended in a communication vacuum and it becomes very difficult to rectify such a situation.

We know that many Navajo people have said they want their children taught the Navajo language and culture. Look at the number of schools which are offering this type of education. For example, we have Rough Rock, Sanostee, Rock Point, Borrego Pass, and Ramah. Yet some systems still resist the incorporation of an appropriate program or at least the beginnings of such a program in Navajo language and culture.

Culture and language unites the Navajo with common bonds, not to mention the most important Navajo clan system which, to me, is the basis of many of present day unity and increasing importance within our Navajo population. Many different cultures (European) have learned that two, three, or more languages enrich their people's lives, allowing them to move among several societies and yet retain their respective national interests in tack.

There is a wealth of culture which is available to the Navajo people such as music, stories, legends, prayers, and also the "ARTS"; weaving, pottery, painting, and many more.

THE SYMBOLS OF THE NAVAJO CULTURE ARE AS REAL TO THE NAVAJO AS ANY CUSTOM OF ANY OTHER PEOPLE, because we are born by, live by, and pass on with the understanding that this is the Navajo life cycle. The Navajo culture should not be in conflict with non-Navajo culture; they must complement each other. This is the case now because we can appreciate the fact that contributions have been made to the United States by Native American Indians in such fields as medicine, education, government, military strategies, names of states and lakes, and many more.

Considerable research has shown that a child who first learns in his own language will have a better chance of success in his later years of school. The development of Navajo curriculum will insure the success of the child, not to mention the success of the school program.

The concept of Navajo language and culture in the school curriculum (i.e., education in the vernacular) must be initiated by Navajo parents and Navajo educators--even if it means to force the issue. We can no longer wait and depend on the Bureau of Indian Affairs, the state government, or the Navajo Tribal Council to begin with a strong bilingual education program. As long as we do not initiate educational programs with our own ideas, the governments I mentioned, will continue to fail to respond. AS INDIAN EDUCATORS, WE HAVE A COMMITMENT TO OUR NAVAJO PEOPLE FOR AN EDUCATIONAL PROGRAM THAT THE NAVAJOS CAN CALL THEIR OWN!

Editor's note

The conference referred to in this article was the Second Annual Naaki Saad Bee Óhoo'aah Conference, more commonly known as the Bilingual Education Conference. This conference was held at the new permanent campus site of the Navajo Community College, Tsaile, Arizona. The following paragraph was taken from DBA's own evaluation of the conference.

"The Conference attendance was great, revealing that there is much concern and interest among Navajo educators concerning bilingual education. The conference held sessions of interest to various groups of educators. There were sessions held for non-English speakers and session for non-Navajo speakers. There was a wide range (in age) of panel members which proved interesting. Their various points of view were observed and heard by the audience. Smaller group sessions were designed to give audience participation and response. There was particularly large audience attending the Navajo panel session. There appeared to be a special interest in this area.

The report goes on to recommend involvement of elderly Navajo speakers on bilingual education as speakers and panelists; that is, to hear and try to understand the elderly Navajo point of view.

Diné Bi'ólta' Association (Navajo School Association) is a non-profit, professional organization whose main purpose is to bring about Navajo self-determination, especially with respect to controlling the schools that serve the Navajo children. More information about DBA and the Navajo Bilingual Education Center can be had by writing directly to the Center at the following address:

DBA, Inc.
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DIVERSITY IN SOUTHWESTERN ATHABASKAN: A HISTORICAL PERSPECTIVE

MURIEL SAVILLE-TROIKE

GEORGETOWN UNIVERSITY

Modern linguists, both structuralist and transformational, have tended to ignore evidence of variation in the languages they described, and have presented instead abstract, orderly pictures of the competence of ideal speakers in homogeneous speech communities. Published descriptions of the Navajo language since 1940 are typical in this regard, and create an impression of a highly uniform and undifferentiated speech community. One exception was that of Gladys Reichard (1945:158), who reports on the complexity:

> . . . there is so much diversity in the Navaho language that, if its distribution were different, we should classify it as dialect. It may indeed transpire that we shall yet do so once we discover the amount and consistency of the diversity.

Reichard did not see pattern in the variations, however, and attributed the Navajos' linguistic diversity to their 'individualistic spirit' and 'eternal desire to travel'.

If the intuition of native speakers is taken as evidence, a rather different picture begins to emerge. Navajos from the central portion of the reservation report that people from Shiprock in the Northeast 'talk differently', and can recite words and pronunciation features that mark the speech of that region. Navajos from Shiprock, on the other hand, feel the language spoken on Black Mountain is the 'original Navajo' and report that older speakers from that area are difficult to understand: 'They have a word for everything, they don't just change tone'; 'Their vocabulary is stronger'; 'They have words to make a sentence shorter; I have to go around the longer way.'

Evidence for regularity in Navajo linguistic diversity

is also available from archival resources.[1] The explorers, military personnel, missionaries, and government officials who recorded Navajo in the 19th century indicate patterns of dialectal variations, which may facilitate the interpretation of modern dialect distribution. The time depth between the earliest documents and current usage is sufficient to additionally indicate many changes in the phonological system and lexicon, and to suggest that several underlying changes have occurred in more basic morphophonemic and syntactic processes.

Particularly when related to other Apachean languages, a description of these variations and changes may provide interesting data for both ethnography and linguistic theory by: (1) providing clues to the settlement history of the Navajo in the Southwest, which has thus far not been determined by archeological evidence; (2) documenting changes in phonological, morphophonemic, and syntactic rules, providing a test for theoretical speculations about 'natural' directions and conditions for rule addition, deletion, modification, and reordering; (3) documenting the nature, scope, and rate of lexical replacement, borrowing, and semantic shifts; (4) identifying regional differences in rate and scope of linguistic change, allowing correlation of these data with such social dimensions as degree of acculturation; and (5) providing attested Navajo forms with greater time depth for more reliable reconstruction of Apachean and even of Proto-Athabaskan. A number of these points will be illustrated in the following discussion, which will consider examples of variation and change in the lexicon, phonology, and morphophonemics of Navajo.

One type of problem encountered by anyone using older documents is that of interpreting transcriptions. The 19th century Apachean data were recorded by surveyors, army officers, doctors, and traders--often eliciting linguistic forms from captives at Bosque Redondo or from native Spanish speakers who had learned Apache as a second language during years of their

own captivity. The native language and residence area of informants are of obvious interpretive importance, but this information is seldom available. The data collectors often devised their own 'rough and ready' transcription systems, although the Smithsonian Institution issued guidelines and made attempts at standardization. The user of these documents must also take into account the native speech of the collector in interpreting whether the native speech of the collector in interpreting whether a symbol such as ch, for instance, represents [š] or [č], or in deciding what sound an r may represent (there is no [r] in Athabaskan). In the following terms reported for White Mountain Apache, for example, my conclusion is that the r's represent long vowels, probably as perceived by speakers of an r-less dialect of English: [ki-yāṛ-gó] small (Chapin 1867); [shitáṛ] father (White 1873); and [táṛge] three (White 1873).

To give some illustration of the variety of spellings to be met with, all of the following forms were recorded for the word for fish: Navajo [hloh] (Eaton 1852), [klō] (Nichols 1866), [tchlō] (Arny 1874), [kloo] (Willard 1868), [clo] (Shaw 1884); Lipan [chun] (Berlandier 1829), [ɬún] and [ɬó^{n}] (Gatschet 1884); Pinaleño [tsluk] (Palmer 1867); Coppermine [chlui] (Whipple 1850, Bartlett 1851). All of the initial consonants in these terms, including the sequence tchl, probably represent the same sound [ɬ]. Note, however, the Lipan entries by Albert Gatschet in 1884, [ɬún] and [ɬó^{n}]. He seems to be reliably recording [ɬ], tone, nasalization, and (in other forms) the [ɣ] as well. This is one reason I am confident that the variation I have noted below really did exist. Fortunately, Gatschet recorded speakers of more than one dialect of several languages, so the comparative data seem quite reliable.

The problem raised by inconsistent transcriptions is far from hopeless. In fact, in most cases it is easier to reconstruct variant speech forms from such linguistically naive data than from the phonemicized transcriptions of later linguists.

By far the greatest amount of data we have on Navajo and other Southwestern Athabaskan languages is in the form of word lists and dictionaries. From such sources, supplemented with recent field work, we can observe instances of lexical variation and change which have occurred or can now be seen in progress. Several examples are discussed below.

The Franciscan Fathers (1910) and Young and Morgan (1943) report two words for both sun and moon:

'sun'	[ǰóhoonaa'éí] (lit. 'bearer of the day')
	[šá]
'moon'	[tɬ'éhonaa'éí] (lit. 'bearer of the night')
	['oolǰéé]

No other occurrences of [šá] are reported in Navajo, except for Haile's notation (1951) that it is preferred in compounds but not as a free form, and Hoijer's note (1963) that it is an archaic term.

The words for moon, on the other hand, have both been attested since the earliest records of Navajo speech, but seem to illustrate a lexical replacement still in progress rather than synonomous or dialectal usage.

Before 1860:	[old-chay] (Simpson); [kle-ho-no-ai] (Eaton).
1860-1900:	[ool-jee] (Nichols); [kle-ho-no-ai] (all other sources).
1901-1925:	Both, with [tɬ'ehonaa'éí] preferred.
1926-1950:	Both, with ['oolǰéí] preferred.
After 1950:	Only ['oolǰéí].[2]

Comparative data suggest that the phrase form [ǰohana'éí] for sun has come into all of the Apachean languages as a lexical replacement for the older [ša], which survives only as a bound form used in a very restricted context. [ša] is used for both sun and moon in most Northern Athabaskan languages and was recorded for sun in Jicarilla in 1875 (MacElroy) and for moon in Lipan

in 1829 (Berlandier). These data indicate that its replacement in the Southwest has been a rather recent one.

Terms reported for wind do not present the same picture of lexical replacement within Navajo as sun and moon, but do indicate that a semantic shift has taken place. Data collected near St. Michael's, Arizona between 1900 and 1940 (Franciscan Fathers 1910; Hoijer 1945[3]; Haile 1953[4]) cite [-č'i], a form cognate with those listed by Hoijer (1945) for other Apachean and Athabaskan languages. All other sources of Navajo data, from Eaton (1952) to current informants, cite [niyol] (also 'it is blowing' for older speakers; however, the verbal element is no longer recognized by at least some teen age informants). Although present day Navajo speakers still have the term [-č'i], it now means 'air with little or no movement'.

The process of lexical 'degradation' or 'debasement', often illustrated in English by such words as villain and hussy, is shown from historical records to be operative in Navajo as well. The last Navajo informant to use [-kah] 'husband' was Chief Delgadito around 1868 (Willard), although it has continued to be recorded in other Apachean languages to the present. The current Navajo 'husband' [hostiin] was first cited by Powell (1870). The older [-kah] still continues in use today, but it now has the pejorative connotation 'the man one goes around with but isn't married to'.

A comparable shift affected the older term 'wife' [-at], though here the shift occurred somewhat later. The term apparently remained in accepted usage until around 1900. The present term 'wife' [esdzą́ą́n] (or [-esą́]) was attested for the first time in 1910 by the Franciscan Fathers.

A more recent example of debasement of meaning is to be found in the use of [tl'iiš] 'snake'. It has been replaced by [na'ašǒ'í] in polite speech, while the older term is used for swearing and is reported to be 'not very nice'. Elderly Navajos still use [tl'iiš] for 'snake', indicating that the shift has been a fairly recent one.

Regional lexical variation is found in terms for tree. Hoijer (1945) gives [cin] in Navajo and [cin], [č'il], [čiš] and [nooščíí] in other Apachean languages. The term [cin] has been reported by Navajo informants from 1852 (Eaton) to the present, but [t'is] and [nišči̢] also occur. The regional variation may, however, be more apparent than real, since it reflects the fact that there is no generic word for tree in Apachean; the words cited have different specific meanings, and the circumstances (including the location) of their elicitation may have determined the form given.

New words (phrases) being coined in Navajo to describe cultural innovations are also exhibiting extensive variation. Both radio and telephone are called [bešhalkaɬé] 'metal that sings' near Shiprock and [bešhalne'é] 'metal that talks' near Black Mountain, and an airplane is [bešnat'a] 'metal that flies' in New Mexico and [čidnat'a'i] 'car that flies' in the central region.

Bilingual education is increasing the need for new words in Navajo, and four different terms for triangle were heard in as many schools. None of the four teachers knew an existing word in Navajo for the concept, and each coined a slightly different descriptive phrase to label it so as to teach it to their students. If this solution to the need for a new term and the accepting attitude expressed by speakers toward multiple coinages are typical of Navajo linguistic behavior, these factors may account for much of the diversity in recent lexical acquisition. Adult speakers almost never borrow words from another language. Young bilingual children frequently use English words in otherwise Navajo contexts, but seem to replace them with Navajo words or phrases by the time they are teen agers. This could be the result of increased fluency in Navajo, or of the acquisition of negative attitudes toward borrowing foreign words into the language.

It is probable that increasing literacy in Navajo will decrease the amount of lexical variation. At the present time, however,

the need to choose among variants for printing and other educational purposes presents a problem in language standardization. It is one which should be approached with full knowledge of the dialect differences and correlated sociolinguistic information, and perhaps with the judgements of a Navajo Academy.

The greatest degree of variation and change in the Navajo language occurs in its phonological system. The historical data are not entirely reliable in this area, particularly with regard to the description of tone, vowel length, and such non-English phonemes as ['], [ɣ], and [ɬ]. A welcome exception is Gatschet (1882-85), who seems to have discriminated and recorded even these segments accurately, and whose data will thus be given greater weight in this analysis whenever it is relevant.

TABLE I

[y]:[z]

	N	Cop	PL	SC	M	WM	Ch	J	L	KA
snow	yas/zas	z	z	z	z	z	z	z	z	z
wind	niyol		y	y		ž		z	ž/y	ž
buffalo	ayání/ɛzáni	y						y	z	z
name	olyi/iži	y		ž	ž	y	z	ž	z	
friend	yahotɛ/zohotɛ									
louse	yaa'			y			ž/y	y	y	ž

Cop Coppermine
PL Pina Leño
SC San Carlos
M Mescalero
WM White Mountain (Coyotero)
Ch Chiricahua
J Jicarilla
L Lipan
KA Kiowa Apache

Table I shows the [yas]:[zas] alternation in Navajo words for snow, well-documented by both 19th and 20th century linguists,

and the [zas] form in all other Apachean dialects. Hoijer has stated that the [z] is an irregular correspondence, but I have found enough similar examples in archival data (wind, buffalo, name, etc.) to suggest the [y]:[z] division is, or was, quite widespread. It should be noted, however, that some [y]'s are attested in every dialect listed except Mescalero and Kiowa Apache. In Lipan and Chiricahua where both forms are recorded for the same word, the [ž] is older, although the distinction may be regional instead of temporal. In Lipan, for instance, the [y] was reported by Gatschet in the Ft. Griffin, Texas, area, while the earlier [ž] was reported by Berlandier from a band of Lipans which ranged further south. The [y]:[z] division exists in the Northern Athabaskan languages as well, but the Pacific Athabaskan languages have only [y] in these terms. This suggests that the establishment of the [y]:[z] alternation may predate the southward migration of at least some Apachean bands.

TABLE II

[t]:[k]

	N	Cop	PL	SC	M	WM	Ch	J	L	KA
three	tą́ą́/kąą́	t	t	t	t/k	t	t	k	k	k
turkey	tą̄zhii					k	t	k	k	
turtle	[Ap. istyel/eskēl]	t	t		t			k	k	
seven	teusteit	k	k/t		t	t		k	k	k
heel	-ketal								k	k
six	hastą̄ąh	t	t		t/k	t		k	k	k
father	[Ap. atta']	k?	t	t	t	t	t	k/t		
water	tó	t	t	t	t	t	t	k	k	k

The [t]:[k] correspondence in Table II was noted by Hoijer (1938), who used this as a primary criterion in dividing Eastern from Western Apachean, but archival data reveal a similar division even within Navajo. The isogloss seems to coincide with the

Lukachukai Mountains, running north to south, as does the [yas]:[zas] division. Neither division is as neat as Hoijer suggested, or as it would appear if we only used, say, the words for snow, three, and water, but this neatness could be very misleading. Many [k]'s occur in so-called Western Apache, and many [t]'s in the Eastern division.

The geographic distribution of this sound correspondence indicates that Eastern Navajo may be closer to all other Apachean languages than are Western dialects. Additional evidence for this hypothesis is found in historical information on the [t]:[k] correspondence. [ka] 'three' was recorded in Navajo by Bristol (1865), Willard (ca. 1868), Powell (1870), and Loew (1974). Words for snow were also collected by two of these sources, and both recorded [zas]. Bristol and Willard collected their data east of the Lukachukai Mountains: Powell and Loew worked at Fort Defiance, the supply distribution center for the reservation, which was evidently frequented by Navajos from all parts of their residence area.

Oscar Loew (1874) may have recorded the intermediate link in the [t]:[k] correspondence in the San Carlos term for three [ɻage]. His initial [ɻ], as we can see from his use of it in [petɻa] father as well, apparently represents [x], which is still typically used in the heavy aspiration following [t] in some dialects. This voiceless velar fricative release may be the source of [k] in these terms.

Another probable sound change in some Navajo dialects is from spirant [ɣ] to glide [w] or [y]. The data would appear to suggest an even further change from stop [g] to spirant to glide, but it is quite likely that the g recorded by phonetically untrained transcribers in the 19th century was really a [ɣ]. This change has evidently proceeded at varied rates in different regions.

'tooth' [-go] Simpson (1849); Eaton (1852); Whipple (ca. 1855); Nichols

		(1866-68); Willard (ca. 1868); Shaw (ca. 1884)
	[-ɣo]	Gatschet (1882-85); Hoijer (1945); Young and Morgan (1943); Eastern reservation informants (1969)
	[-wo]	Franciscan Fathers (1910); Black Mountain and Chaco Canyon informants (1969)
'house'	[-gan]	Whipple (ca. 1855); Nichols (1866-68); Willard (ca. 1868); Powell (1870); Loew (1874)
	[-ɣan]	Shaw (ca. 1884); Franciscan Fathers (1910); Young and Morgan (1943); Eastern reservation informants (1969)
	[-wan]	Black Mountain informant (1969)
'egg'	[-genžii]	Eaton (1952-53); Whipple (ca. 1855); Nichols (1866-680; Willard (1868); Arny (1874); Shaw (ca. 1884)
	[-ɣeežii]	Hoijer (1945); Haile (1953)
	[-yeežii]	Franciscan Fathers (1910); Young and Morgan (1943)
	[-yaažii]	Informants (1969)

Many Navajo speakers still 'feel' that most [w]'s and [y]'s come from [ɣ], and Navajo students learning to read the language pronounce gh as [w] or [y] according to whichever variant is appropriate for their dialect. The continued access of [w] and [y] speakers to underlying [ɣ] is probably due to its continued use in other dialects which they hear from time to time.

A more detailed diachronic analysis is possible from data on the [u]:[o] correspondence in such words as [kų]:[kǫ] 'fire' and [tu]:[to] 'water', which are summarized in Table III. This is not a phonemic distinction in Navajo, but appears to be a

regional allophonic variation. Counting only sources for which the place of data collection is known, [u] occurs across the Northern boundary and in the central postion of the reservation, and [o] in the East, South, and West. Ft. Defiance again presents a mixed picture with almost even distribution of each sound in archival sources.

In Lipan and Kiowa Apache, which begin both fire and water with [k], a [kǫ]:[kǫ̨] distinction is usually maintained, suggesting a possible additional correlation with nasalization and/or tone.

TABLE III

[u]:[o]

	N	Cop	PL	SC	M	WM	Ch	J	L	KA
tobacco	nat'oh	u			o	o			o	u
cloud	k'os		u	o	o				o	
fire	kǫ'	o	o/u	o	o/u	o/u	o	o/u	o/u	o/u
water	tó/tu	o	o	o/u	u	o/u	o	o	u	u
bird	[Ap. glo/glu]		o			u	u			
fish	ɬóó'/ɬúú'	ui	u	o	u	o		o	o/u	

Additional data were collected from forty six first grade Navajo children in Sanastee and Toadlena in the East, Greasewood in the South, and Cottonwood in the center of the reservation. With the exception of the Southern region, the distribution of [u] and [o] seems about the same with this generation as with their great-great grandparents. For fire, twice as many Greasewood and Cottonwood children say [kų] as [kǫ], while almost four times as many Sanastee and Toadlena children say [kǫ] as [kų].

It was hypothesized that the variation might be among social groups rather than geographical regions, but an examination of demographic data on these children does not support that view. Speakers of the same clan use both forms--even within the same region. While the frequency in the choice of variants does

correlate with geography, many questions remain. The most puzzling in this regard is why five first grade children whose parents were all born and currently reside in the same community near Cottonwood are divided three [kụ] to two [kǫ], seemingly a chance distribution. Without exception, on the other hand, children whose parents were born in Sanastee or Toadlena say [kǫ]. The few [kụ] speakers in those locations have moved in from another area.

Demographic data on these children also show a far more stable population than Reichard (1945) and others have noted. Over seventy five per cent of this sample lives in the same region where at least one, and usually both parents were born. This clearly indicates that the Navajo's 'desire to travel' cannot account for much of their linguistic diversity. Matrilocal residence still appears to be a rather stable phenomenon in Navajo culture, and some paternal relatives are also close at hand. The effects of residence pattern in Navajo on children's speech is not obvious from clan membership alone. The need is apparent for collection of additional linguistic data within several immediate and extended families, correlating the children's family and outside linguistic contacts with their own speech patterns.

Some of the most uniform features of present day Navajo pronunciation occur as a result of rules in the language which require consonant harmony within morphemes and vowel harmony between possessive prefixes and stems. Archival data attest to considerable variation, however, and prove that these phonological rules did not become established in Navajo grammar until after 1900.

Consonant harmony applies primarily to sibilants in the present form of the rule.

$$\begin{bmatrix} +\text{cns} \\ +\text{cnt} \\ -\text{nasal} \\ -\text{cmp} \end{bmatrix} \rightarrow [\alpha\text{grv}] / \quad \begin{bmatrix} +\text{cns} \\ +\text{cnt} \\ -\text{nasal} \\ -\text{cmp} \\ \alpha\text{grv} \end{bmatrix} \; [\quad]_{o} \; \underline{\quad\quad}$$

In the environment of this rule, $[\quad]_{o}$ indicates any number of segments or null. If an [s] or [z] occurs in a morpheme, any other sibilant must be [s] or [z] and not [š] and [ž]. If [š] or [ž] occurs, [s] or [z] may not. (Directionality in the application of this rule is here determined from historical information. Direction of harmony is ambiguous if only synchronic data are used.) This means that [šaš] 'bear' and [sis] 'belt' are allowable forms, but *[saš] and *[šis] are not. This is also true when the sibilants are parts of consonant clusters (or affricates, depending on the analysis). The segments [ts] and [ts'] may occur in the same morpheme, but [tš] and [ts'] may not.

All Navajo speakers heard by this writer or reported on by other linguists since 1910 say [šaš] 'bear' and [č'oš] 'worm' in accordance with this rule, but earlier data do not consistantly exhibit this harmony: [šas];[čos] (Eaton 1852-53); [ša-še] (Whipple ca. 1855); [šaš] (Bristol 1865); [šus] (Nichols 1866-68); [šoš] (Whipple ca. 1855); [šiz];[čuš] (Shaw ca. 1884). Archival data additionally suggest that this rule may not have been operative at all in other Apachean languages: Lipan [šas] (Berlandier 1829); Coppermine [šas] (Bartlett 1851); White Mountain [šus] (White 1873-75).

A current rule for vowel harmony in Navajo requires that the [i] of the possessive prefix become [a] or [o] when the vowel of the following stem is [a] or [o], and a [k], ['], [ɣ], or [h] intervenes.

$$[+\text{syl}] \rightarrow \begin{bmatrix} +\text{grv} \\ -\text{cmp} \end{bmatrix} \; / \; [-\text{syl}] \; \underset{\substack{\text{Prefix} \\ \{\text{Poss}\}}}{___} \; \begin{bmatrix} +\text{cmp} \\ \left\{ \begin{matrix} -\text{cnt} \\ -\text{cns} \\ -\text{syl} \end{matrix} \right\} \end{bmatrix} \; \begin{matrix} +\text{grv} \\ +\text{cmp} \end{matrix}$$

A Navajo says [šilɬɬ'] 'my horse', [šiná] 'my eye', and [šitsó] 'my tongue', but cannot say *[šǐgaan] 'my arm', *[šigod] 'my knee', or*[šiɣoo] 'my tooth'. He will use instead [šagaan], [šagod] or [šogod], and [šaɣoo'] or [šoɣoo']. In addition, vowel harmony is usually required with the stem [-má] 'mother', although [šimá] is occasionally heard.

Archival data show that vowel harmony was quite well established in the 19th century in cases where stems began with ['], but (with the exception of one recorded speaker) had not yet generalized to [g] (or [ɣ]).

'my wife'	[ša'at]	Simpson (1849); Eaton (1852-53); Bristol (1865); Nichols (1866-68); Loew (L874); Shaw (ca. 1884)
	[ši'at]	Powell (1870); Arny (1874)
'my tooth'	[šogo]	Thompson (ca. 1872)
	[šigo]	Whipple (ca. 1855); Powell (1870); Arny (1874)
'my knee'	[šigod]	Powell (1870); Gatschet (1882-85)
'my arm'	[šigaan]	Bristol (1865); Powell (1870); Gatschet (1882-85)

Vowel harmony before [-má] has been attested by Eaton (1852-53), Bristol (1865), Nichols (1866-68), and Loew (1874), but the continued use of [ši-] was recorded through the same period by Whipple (ca. 1855), Willard (ca. 1884).

It appears that vowel harmony was an innovative rule in Navajo during the 19th century which applied only before ['] and then generalized to application before all back consonants. It evidently did not spread at that time to other Apachean languages since [i] is the only vowel recorded by early sources

in the possessive prefixes, even before ['], and can still be attested in Apache speech (San Carlos [bi'ah] 'his wife')[5].

Other primary morphophonemic processes in Navajo are the widespread reduction of forms by the deletion of one or more phonological segments and the contraction of two or more segments into a modified form. Young[6] feels there may be current dialect differences in the application of these rules, but this remains an unexplored question. Further analysis of both diachronic and synchronic data promises to yield interesting insights into the processes of rule addition and generalization in this component of Navajo grammar.

It is far too early in this study of variation and change in Southwestern Athabaskan to make many definitive statements, but several hypotheses are suggested for further data collection and analysis.

1. There is indeed a regional patte in linguistic variation in Southwestern Athabaskan, although most correspondences must be described in terms of frequency in the use of alternant forms rather than by clear cut regional boundaries. An exception to this in Navajo may occur at the Lukachukai Mountains near the present Arizona-New Mexico border, which is the location of several major isoglosses.

2. Phonological features exhibit the greatest degree of variety today and in recorded history. Synchronically, regional alternation occurs between segmental phonemes ([y]:[z]), allophones ([u]:[o]), and in the occurrence of tone, vowel length, and nasalization (which I have not discussed in this paper). Diachronically, sound changes include regional shifts which diversify the language ([ɣ] to [w] or [y]) and which generalize features of pronunciation ([k] to [t] in Navajo 'three').

3. Navajo morphophonemic rules seem to begin with optional application in a limited context and generalize in both usage and scope. Some variation can be observed in most rules at

any point in time, but of those thus far analyzed, this appears to be the most stable component of Navajo grammar.

4. Data on linguistic variation can provide historical settlement and contact information as well. The similarity of dialect patterns before 1863 and after 1868, for instance, indicates that the many Navajos who were interned by the U.S. Cavalry at Bosque Redondo in the intervening years returned to about the same relative locations. Many more, particularly in the central and northern regions, evidently escaped relocation entirely and have lived uninterruptedly on the same land.

5. The Eastern Navajo are more closely related to other Apachean dialects than is Western Navajo, as is illustrated by the historically shared [t]:[k] division and the [zas]:[yas] correspondence. This supports the hypothesis that Athabaskans immigrated in small bands to the Southwest, and suggests that Eastern Navajos, Lipans, and Jicarillas arrived later than Western Navajos and other Apaches, instead of the usual assumption that all Navajos preceded the Eastern Apaches into the region.

One definite statement which <u>can</u> be made at this time is that no homogeneous Navajo speech community has ever existed in the Southwestern United States.

I think one of the most interesting facets of this preliminary investigation has been the demonstration of the direct relevance of historical information to the synchronic description of dialect differences. The archival data make it possible to recognize survivals and innovations in the lexicon and phonological system, to see patterns of contact in a complex web of interrelationships, and to identify differences caused by differential rates of change in progress.

NOTES

[1]I wish to thank the Smithsonian Institution for permission to cite material from their archives.

[2]Still further evolution in usage may be occurring. My teen age informants use [ǰohana'e] (cf. 'sun'). They have heard ['oolǰéí], but feel it is not as common.

[3]Hoijer is reporting on data collected by Edward Sapir. I do not know the exact place of data collection, but Sapir credits Father Haile of St. Michael's Mission with assistance in his work.

[4]John P. Harrington, in uncatalogued notes in the Smithsonian Institution of an interview with Haile in 1937, describes the priest as over seventy years old. I will therefore assume that Haile's 1951 dictionary is based on much earlier fieldwork.

[5]I wish to thank Professor Richard O'Brien, S.J., for permission to use data elicited from the informant for his field methods class, Georgetown University, Fall 1972.

[6]Robert W. Young, personal communication, July 1969.

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AŁ'ĄĄ DINE'É BIZAAD AŁHĄĄH NAHA'NÍŁÍGÍÍ

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Díí nahasdzáán bikáa'gi t'óó ahayóí aŁ'ąą dine'é kéédahat'į dóó bizaad aŁdó' aŁ'ąą ádaat'éego yee yádaaŁti'. T'óó báhózínígo éí táá'di dimíil bíighahgo saad aŁ'ąą ádaat'é daaní saad ndeiŁkaahígíí. Díí t'áá kǫǫ́ Hoozdoh Hahoodzooígíí dóó Yootó Hahoodzooígíí biyi' bee yádaati'ígíí t'áá lą'í aŁ'ąą át'éego át'é. T'áá díkwíhíyee' kwe'é daasdzoh:

(1)

Naabeehó	Naasht'ézhí
DziŁghá'í	Bilagáana
Nóóda'í	Naakaii

Łahda aŁ'ąą dine'é bizaad aŁhąąh nii'niŁgo doo aheeŁt'éeda naaltsoos bikáá' ályaago dóó bee ha'oodzíí'go. Ge' shoo, Ła' aŁhąąh ndadii'niŁgo dadínííl'įįŁ. Bizaad chooz'įįdígíí éí Naabeehó dóó Oozéí wolyéhígíí kiis'áanii--nihikéyah bíighahgóó kéédahat'ínígíí bizaad. Jó nihí <u>tó</u> dabidii'nínígíí éí <u>kuuyi</u>[2] deiŁní. Náánáá <u>tsé</u> éí <u>owa</u>. Ła' éí kǫǫ́ nihá aŁkéé' daasdzoh:

(2)

<u>Naabeehó</u>	<u>Oozéí</u>[2]	
ni'	tuchkwa	'ground'
Łid	kwiichingwu	'smoke'
kǫ'	qʉ̈yʉ̈hi	'fire'
tl'oh	tuusaqa	'grass'
yas, zas	nuva	'snow'
Łóó'	paakiw	'fish'
Łéechąą'í	pooko	'dog'

Díí wódahdi naaki aŁ'ąą dine'é bizaad aŁhąąh nii'nilgo danííl'į-ígíí bik'ehgo nihiŁ béédahózin naaki saad chooz'įįdígíí doo

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haada yit'éego aheeɮt'éeda naaltsoos bikáá nii'nilgo dóó bee ha'oodzíí'go. Saad ɮa' bináánéi'nilgo ndi doo ahidínéelnáada doo. Díí saad t'áá áɮah doo aheeɮt'éeda dooleeɮ.

Ákondi ɮa' aɮ'ąą dine'é bizaad aɮhąąh ninááná'nilgo éí k'asdą́ą́' t'áá aheeɮt'éedoo. Kǫ́ǫ́ ɮa' aɮhąąh ninááná'nilígíí náádadínóoɮ'įįɮ. Bizaad chonáánáoz'įįdígíí éí nihí nihizaad dóó Dziɮghą́'í bizaad. Jó nihí tó (water) dabidii'nínígíí éí tóó deiɮní. Nááná tsé éí tsé́é (rock) deiɮní. Nááná ɮa' éí kǫ́ǫ́ daasdzoh:

(3)	Naabeehó	Dziɮghą́'í	
	ni'	ni'	'ground'
	kǫ'	kǫ'	'fire'
	tl'oh	tl'oh	'grass'
	yas, zas	zas	'snow'
	ɮóó'	ɮog	'fish'
	ɮéé́chąą'í	ɮíįchaayáné	'dog'

Díí éí saad ndeiɮkaahígíí yee biɮ nibéédahwiizįįh ɮa' aɮ'ąą dine'é bizaad k'asdą́ą́' ahidaaɮt'é dóó ɮa' ts'ídá doo ahidaaɮt'éeda. Jó Dziɮghą́'í bizaad t'áá nihizaadjí ahodiilá daaní. ɮa' saad bináánéi'nilgoshįį saad k'asdą́ą́' ahidaaɮt'éhígíí díkwíshíí ńt'ę́ę́'.

Áko Naabeehó dóó Dziɮghą́'í bizaad lą'ígo saad ahidaaɮt'ée ndi Naabeehó yáɮti'go Dziɮghą́'í doo áɮahjį' bik'ida'diitįįh da, éí doodago Naabeehó doo ak'i'di'dootįįɮ da Dziɮghą́'í yáɮti'go. Hazhǫ́shįį díkwíshįį saad k'asdą́ą́' aheeɮt'ée ndi ɮa' t'įįhdígo aɮ'ąą át'é. Díí ɮéé́chąą'í dabidii'nínígíí éí ɮíichąąyáné deiɮní. Jó díí jinéɮ'įįgo saad k'asdą́ą́' t'áá aheeɮt'é dóó bee ha'oodzíí'go aɮdó' k'asdą́ą́' t'áá aheeɮt'éego diits'a'--ákót'ée ndi t'įįhdígo aɮ'ąą át'é. Kǫ́ǫ́ nááná ɮa'; Naabeehó ɮóó' daanígo Dziɮghą́'í éí ɮog daaní. Díí ndi t'įįhdígo aɮ'ąą át'é ájíniihgo dóó naaltsoos bikáá' ájiiɮ'įįhgo. T'áá díkwíshįį saad kót'éego, t'įįhdígo aɮ'ąą át'é. Jó k'asdą́ą́' ahidaaɮt'éhígíí bee nihiɮ hóóne'. K'ad éí ɮa' Naabeehó dóó Dziɮghą́'í bizaad ts'ídá doo ahidaaɮt'éhígíí dadínííl'įįɮ. Jó nihí béeso dabidii'nínígíí éí Dziɮghą́'í zhááli deiɮní. Dóó chidí éí naalbiil deiɮní. Áádóó t'áá díkwíshįį ákót'éego aɮ'ąą ádaat'é. Ákondi ts'ídá doo ahidaaɮt'éhígíí doo hózhǫ́ ɮą́ąda, nááná k'asdą́ą́' ahidaaɮt'éhígíí éí lą'í chidayooɮ'į.

Haash yit'éego Naabeehó dóó Dziłghą'í bizaad k'asdą́ą́' aheełt'é? Jó ałk'idą́ą́' Naabeehó dóó Dziłghą'í t'ááłá'ígíí dine'é át'éé ńt'ę́ę́' ha'ní. T'ááłá'í bizaad dóó t'ááłá'í dine'é danilį́į́ ńt'ę́ę́ jiní. T'áá ałah diné wolyéego ádójíí ńt'ę́ę́'. T'ahdii Naabeehó t'áá akót'éego adadóji; Dziłghą'í éí t'į́į́hdígo łahgo át'éego ádadóji, nnéé níigo ádadóji. Dííjį́į́góó éí doo t'ááłá'ígíí nlį́į́go ntsídaakeesda. Ałk'idą́ą́' éí bizaad t'áá aheełt'éé ńt'ę́ę'go biniinaa dííjį́į́góó bizaad k'asdą́ą́' t'áá aheełt'é. Áko díí Naabeehó dóó Dziłghą'í bizaad éí ahiłk'éí. Ałhajíí'áázh nahalingo éí doodago éí hamá t'ááłá'í nahalin Naabeehó dóó Dziłghą'í bee ntséhákees.

Naabeehó dóó Dziłghą'í ałk'éí nilį́ bizaadk'ehgo baa ntsíhákeesgo. Ndi ła' saad chidayooł'įníígíí Naabeehó doo yééhósin da éí doodago éí saad nihí chideiniil'įníígíí Dziłghą'í doo yéé dahósin da. Ha'át'íí lá biniinaa át'éé lá? Báá ídahonosingo éí t'ááłáhídóó háájéé'ii ndi t'į́į́hdígo ałą'ą́ą́ át'éego t'áadoole'í deiníjí. Jó Naabeehó daniidlį́níígíí ndi t'áá át'é t'áadoole'í ałą'ą́ą́ át'éego deiníjí. Jó ła' diné mósí daaníigo; ła' éí másí daaní. Nááná ła' éí ńt'ę́ę́' daaníigo ła' éí ńt'éé' daaní. Nááná ła' éí kǫ́ǫ́ ałkéé' daasdzoh:

(4)	yas	zas
	naaldlooshii	naaldlǫǫshii
	ntséskees	ntséskęęs

Kót'éego diné t'ááłá'ígíí bizaadgo ałą'ą́ą́ ndaanéego biniinaa bizaad ałą'ą́ą́ ádaane'. Jó k'ad aniid ndaakaiígíí bichó dóó binálí yádaałti'ígi át'éego doo yádaałti'da. Áko diné bizaad t'ááłá'í ńt'ę́ę́'go nízaadi ałą'ą́ą́ dabighango bizaad t'į́į́hdígo ałą'ą́ą́ ádaane'. Jó áhá'níigo Naabeehó dóó Dziłghą'í bizaad ałą'ą́ą́ át'é silį́į́' ałts'ánínáádóó bizaad ałdó' t'áá sahdii át'éego deeskai. Díí biniinaa dííjį́į́góó bizaad doo t'áá áyisíí aheełt'édago yee yáłti' silį́į́'.

Naabeehó bizaad dóó Oozéí bizaad shą'? Da' ahiłk'éísh? Jó bizaad dóó nihizaad ałhąąh nii'nilgo daníil'į'ę́ę bik'ehgo nihił béédahózin--ts'ídá doo ahiłk'éí nilį́į́ da. Jinéł'į́igo dóó wójiihgo. Díí Naabeehó bizaad dóó bilagáanaa bizaad shą'? Jó nihił béédahózin; díí ałdó' doo ahiłk'éida.

Da' Naabeehó bizaadísh Dziłghą'í bizaad t'éíyá bik'éí? Ndaga'. T'áá díkwíshɬɬ bik'éí. Jó Dziłghą'í éí Hoozdoh Hahoodzooígíí biyi' kéédahat'ɬ, łą' éí Yootó Hahoodzooígíí biyi' kéédahat'ɬ. Naabeehó yik'éí danilɬnígíí bizaadk'ehgo baa ntsáhákeesgoígíí éí kwe'é daasdzoh: Beehai (Jicarilla), Naashgalí (Mescalero), Chíshí (Chiricahua).

Nááná łą' éí náhookǫsjígo kéédahat'ɬ. Canada dóó Alaska hoolyéedi. Áádi t'óó ahayóí jiní. łą' éí Sarcee daolyé daaní. Díí Sarcee daolyéhígíí éí Canada hoolyéedi kéédahat'ɬ jiní. Haa'íshą' Sarcee éí nihizaad bił ałhąąh nii'nilgo dadínííl'ɬɬł.

(5)	Naabeehó	Sarcee	Naabeehó	Sarcee
	tó	tú	tl'oh	tl'ugh
	ni'	ni	yas, zas	zʌs
	łid	tli	łóó'	tlúk'á
	tsé	tsá	łééchąą'í	tlí
	kǫ'	ku'		

Haash yit'éego baa ntsídaohkees? Naabeehó dóó Sarcee saadísh yee ałk'éí ndlɬ? Sarcee bizaad dóó Naabeehó bizaad naaltsoos bikáá' nii'nilgo doo ts'ída yéego aheełt'éeda, ákondi k'asdą́ą́' aheełt'é. Éí biniinaa łą' ádaaní Naabeehó dóó Sarcee bizaadk'ehgo baa ntsíhákeesgo ałk'éí ndlɬ. Ákondi doo Naabeehó dóó Dziłghą'í ałk'éí ndlínígi át'éego ałk'éí ndlɬɬda. Jó ákóhodoo'niidgo éí Dziłghą'í dóó Naabeehó bizaad ahiłháá'áázh nahalin, dóó nááná Sarcee dóó Naabeehó bizaad éí ahiłnaa'aash nahalin. Jó díí Sarcee dóó Naabeehó díkwíshɬɬ bita' nááhai ałts'ánínáádóó, éí biniinaa bizaad t'áá yéego ał'ąą át'é silɬɬ'. Naaki ał'ąą dine'é bizaadk'ehgo ałk'éí ndlɬɬgo, éí t'ááłą'ígíí háájéé' danilɬ ha'ní. Áko díí Naabeehó dóó Sarcee dóó Dziłghą'í bizaadk'ehgo ahiłháájéé' danilɬ. Éí Athabaskan wolyéego dayózhí.

Oozéí éí doo Naabeehó bik'éí át'éeda bizaadk'ehgo baa ntsíhakeesgo. Ákondi díí Kiis'áanii t'áá sahdii bik'éí hóló. Éí t'éíyá Uto-Aztecan deiłní. Éí áájí ałk'éí danidlínígíí éí kwe'é daasdzoh: Béyoodzin dóó Kétl'áhí dóó Kégiizhí. Díí éí t'áá díkwíhíyee' kǫ́ǫ́ daasdzoh.

Bilagáanaa ałdó' bik'éí hóló bizaadk'ehgo. Éí Bééshbich'ahii lá dóó Naakaii lá dóó díkwíshɬɬ. Ákondi Bééshbich'ahii éí yił

háá'áázh nahalingo yaa ntsídaakees, nááná Naakaii éí biɮ naa'aashgo yaa ntsídaakees. Áájí aɮk'éí danidlínígíí éi Indo-European deiɮní.

COMPARING LANGUAGES (ENGLISH VERSION)

There are many different languages on this earth. It is said that there are about three thousand different languages. Right here, in this area, many different languages are spoken. Some of the languages spoken around here are

(1') Navajo Zuni
Apache English
Ute Spanish

These are just a few; there are many others.

Sometimes, when we compare two languages, we see that they are very different. Let's try it. Let us compare some words in Navajo and Hopi. We will write down some words in Navajo, and beside each word we will write down the Hopi word that means the same thing:

(2')

Navajo	Hopi[2]	
tó	kuuyi	'water'
tsé	owa	'rock'
ni'	tuchkwa	'ground'
ɮid	kwiichingwu	'smoke'
kǫ'	qöyöhi	'fire'
tl'oh	tuusaqa	'grass'
yas, zas	nuva	'snow'
ɮóó'	paakiw	'fish'
ɮééchąą'í	pooko	'dog'

The Hopi words are very different from the Navajo words. If we kept on adding words to this list, we would see that Hopi is almost always different from Navajo.

But this does not always happen when we compare two languages. Sometimes we find that two languages are very similar. Let us try another language comparison. This time, let us compare some words in Navajo and Apache.

(3')

Navajo	Apache	
tó	tóó	'water'
tsé	tsée	'rock'
ni'	ni'	'ground'
ɣid	ɣid	'smoke'
kǫ'	kǫ'	'fire'
tl'oh	tl'oh	'grass'
yas, zas	zas	'snow'
ɣóó'	ɣog	'fish'
ɣéé́chąą'í	ɣɬɬchaayáné	'dog'

We see that Navajo and Apache are almost the same. If we kept on adding to this list, we would see that Navajo and Apache have many words in common. However, Navajo and Apache aren't exactly the same. It is not always possible for Navajos to understand Apaches when they speak, and it is not always possible for Apaches to understand Navajos. Although they have many words in common, sometimes the words sound a little different. The Apache word ɣog is almost like the Navajo word ɣóó', but it sounds a little different. And the Apache word ɣɬɬchaayáné is almost the same as the Navajo word ɣéé́chąą'í. But still, it sounds a little different. Many words are like this. Sometimes, the Apaches use a word which is completely different from the Navajo word. In Navajo, that with which things are bought is called béeso, but in Apache it is called zhǽáli. And in Navajo that which people drive around is called chidí , while in Apache it is called naalbiil. There are quite a few things which the Apaches call by a different name from the Navajos. But most of the time Navajo and Apache use words which are almost the same.

Why are Navajo and Apache almost the same? It is said that the Navajos and Apaches were once one people. They spoke the same language, and they called themselves diné. Both people still call themselves diné, but the Apaches pronounce it nnéé.

Nowadays, Navajos and Apaches no longer consider themselves to be the same people. But they were once the same, and that is why their languages are so much alike. We can say that the Navajo language and the Apache language are related. The two

languages are like brothers or sisters--they come from a single language, just as brothers and sisters are born of a single mother.

Navajo and Apache are very closely related. But still there are some differences. Why is this? What happened to make Navajo and Apache different? Have you ever noticed that different people sometimes say things a little differently? People who speak Navajo do not always agree in the way they say things. For example, some people say mósí, while other people say másí. And some people say tsís'ná, while others say tsés'ná. This kind of thing almost always happens when a language is spoken over a large area, like Navajo is. We try to explain this in the following manner. The way people speak never remains the same from one generation to the next. Each generation speaks a little differently from the one that preceded it. That is to say, languages change as time passes. And if a language is spoken in two different areas, the changes which take place in one area may be different from those which take place in another. This is how languages become different. And this is what happened with Navajo and Apache. Once there was a single language, but some time ago, the people who spoke this language split up and began to live in separate areas. Since that time the Navajo and Apache languages have developed independently. This is why Navajo and Apache are no longer exactly the same.

What about Navajo and Hopi? Are they related? When we compare Navajo and Hopi, we see that they do not have very much in common. They do not appear to be related. What about Navajo and English? Again, when we compare them, we see that they are very different. They are probably not related either.

Does Navajo have any relatives besides Apache? There are many languages which are related to Navajo. The people called Dziłghą'í, whose language we have already compared with Navajo, live in Arizona. In New Mexico there are other peoples who speak languages related to Navajo. These are the Jicarilla (Beehai), the Mescalero (Naashgalí), and the Chiricahua (Chíshí).

But most of the relatives of Navajo are found far to the north. In Canada and Alaska there are many languages which are

related to Navajo. One of these northern languages is called Sarcee. It is spoken in Canada. Let us compare some words in Navajo and Sarcee:

(5')	Navajo	Sarcee	Navajo	Sarcee
	tó	tú	tl'oh	tl'ugh
	ni'	ni	yas,zas	z-s
	ɁÍd	tli	ɁÓó'	tlúk'á
	tsé	tsá	ɁÉéchąą'í	tlí
	kǫ'	ku'		

What do you think? Do you think that Navajo and Sarcee are related? The Sarcee words look somewhat different from the Navajo words when they are written down, and they sound somwhat different when they are pronounced. Nevertheless, they aren't altogether different, and some of the words are very similar. Sarcee is related to Navajo, but it is not as closely related as Apache is. Remember that we said that Navajo and Apache were like brothers or sisters. Well, Navajo and Sarcee are more distantly related; they are more like cousins. The longer two languages are separate from each other, the more they differ. Navajo and Apache have not been separated very long--so they are quite similar. But Navajo and Sarcee have been separated a long time, so they have become quite different.

When two languages are related, we say that they belong to the same family. The family of languages to which Navajo, Apache, and Sarcee belong has been called Athabaskan.

Hopi is not believed to be related to Navajo, but it does have relatives. Some of the languages which are related to Hopi are Ute, Paiute, Comanche, Pima, and Papago. These languages belong to the family called Uto-Aztecan.

English also has relatives. German is one of the languages which is closely related to English. Spanish is also related to English but not as closely as German is. The family to which English belongs is called Indo-European.

FOOTNOTES

1. Now at Rough Rock School, Arizona.

2. The vowel written /u/ in the Hopi forms is a high back unrounded vowel, normally indicated [ɨ] in the technical literature on Hopi. The vowel written / ö / is a midfront rounded vowel. Long vowels are written double. The symbol /q/ designates a back dorso-velar stop--farther back in the mouth than /k/. The symbol /ng/ represents a dorso-velar nasal, normally [ŋ] in the technical literature.

A DIALOGUE ON THE NAVAJO CLASSIFIER

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Let us imagine that Akaʒii has a friend--call him Bill--who wants to learn Navajo. Akaʒii is pleased about this and, because Bill is a good friend of his, he wants to help him as much as possible. When Bill first comes to Akaʒii for help he has already learned a few simple words:

Bill: Can you answer a simple question, Akaʒii. I know how to say 'he is crying', it's yicha. Now, how do I say 'you are crying'?

Akaʒii: That is simple--it's nicha if you're just talking to one person and wohcha if you're talking to more than one.

Bill: O.K. And how do I say 'I am crying'?

A. That's easy too. It's yishcha.

B. Yishcha. Good. Now let me say them in order, and you tell me whether I get them right:

yishcha
nicha
yicha
wohcha

A. Fine. You have a good memory.

B. How about yich'id 'he is scratching it'? Does that go the same way?

A. What do you mean by 'go the same way'?

B. Well, like...if you want to say 'you are scratching it', how do you do it?

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A. nich'id, of course.

B. And 'I am scratching it' is yishch'id?

A. Yes. And you say wohch'id for 'you are scratching it' when you are talking to more than one person.

B. So it does go the same way--if I know how to say 'he is scratching it', I can turn that into 'you are scratching it' by changing yi to ni at the beginning of the word, just like with yicha and nicha.

A. I still don't quite understand. Why do you want to change yi to ni?

B. I don't want to--I expressed myself badly. Let me try and say it a different way. I don't want to have to learn all the words as separate words. That is, I don't want to have to learn:

yishcha
nicha
yicha
wohcha

whenever I come across a new verb (i.e., word which denotes an action, state, or process). I want to be able to predict all of them from just one of them, so that if I hear a new verb--say 'he is chewing it'--I immediately know how to use it to say 'I am chewing it' and 'you are chewing it' without having to ask you and learn it specially. So I want to learn the pattern of the verb, in a sense.

A. I can see that that would help your memory a lot. 'He is chewing it' is, by the way, yi'aaɮ.

B. That looks similar to the others. Is yish'aaɮ correct for 'I am chewing it'?

A. Yes, it is. And we say ni'aaɮ or woh'aaɮ for 'you are chewing it'. So it shows the same pattern as yicha and yich'id, doesn't it?

B. It looks like it.

A. I think there are other verbs like that. Let's see. There's yik'aas 'he is straightening it'. That goes the same way:

yishk'ąąs
nik'ąąs
yik'ąąs
wohk'ąąs

And yiniih 'he knows about it':

yishniih
niniih
yiniih
wohniih

There are lots of them like that.

B. Good. They are easy. But there's another thing I wanted to ask about. In the book I have been looking at they say that a verb that is used to talk about things that are happening now is 'in the imperfective mode', apparently because things that are happening now are unfinished or "imperfect" in some way. There's also a mode called the "perfective mode", which is used to talk about things that happened in the past (and therefore are finished or "perfect"). I want to find out what pattern the verbs that I have just learned follow in the imperfective mode. For instance, how do you say 'he chewed it'?

A. That's yiyíí'aal.

B. Hm. I wouldn't want to try and guess how to say 'you chewed it' from that and what I know already.

A. It's yíní'aal talking to one person and woo'aal talking to more than one. And 'I chewed it' is yí'aal.

B. It's not yísh'aal?

A. No. yí'aal.

B. So let me repeat it:

yí'aal
yíní'aal
yiyíí'aal
woo'aal

A. Correct. Do you want to try and guess some others? 'He heard about it' is yiyíínii'.

B. So 'you heard about it' should be, let's see, yínínii', and 'I heard about it' yíshnii'.

A. The first one was right, but the second one should be yínii'. There is no sh.

B. O.K. yínii'. And 'you heard about it' talking to more than one must be woonii'.

A. Good. Try another. Yiyíík'ą́ą́z 'he straightened it'.

B. I'll say them in order:

yík'ą́ą́z
yíník'ą́ą́z
yiyíík'ą́ą́z
wook'ą́ą́z

A. Very good. I think you should be able to guess the other forms of the verb if I give you yíních'id 'you scratched it' to work from, instead of 'he scratched it'.

B. O.K. 'I scratched it' should be yích'id and 'he scratched it' yiyíích'id.

A. Good. Here's a last one to try: yínícha 'you cried'.

B. Easy. 'I cried' is yícha and 'he cried' is yiyíícha.

A. yícha is correct, but there's something wrong with the other. It feels overloaded somehow. Ah, I know, it should be yícha too.

B. So yícha means 'I cried' and 'he cried'?

A. Yes. But I don't know why it's different from the other verbs. Perhaps your book will tell you.

B. Perhaps. I'll look when I get home. But I have to leave now. Let me just say the patterns for 'hear about it' so that I can be sure I've got them right.

Imperfective	Perfective
yishniih	yínii'
niniih	yíníni'
yiniih	yiyíínii'
wohniih	woonii'

A. All correct. Goodbye.

B. So long. Thanks for your help.

II. A couple of days later Bill comes back. He has learned some new verbs and wants to find out whether they follow the same patterns.

B. Hi, Akaʒii. I've learned a new verb: yiʒchozh. It means 'He is eating greens', I think. How do you say 'you are eating greens'?

A. niʒchozh.

B. Good. Now let me guess 'I am eating greens'. It should be yishʒchozh.

A. What was that again? It sounded very strange.

B. yishʒchozh.

A. What are you trying to do to the poor word. There's a real mix-up in the middle of it somewhere. It should be yishchozh.

B. You mean there's no ʒ in it?

A. What ʒ?

B. Well, there's a ʒ in niʒchosh and yiʒchozh just before the -chozh part of the word.

A. That's true.

B. Well, where is it in yishchozh?

A. I don't know. It's certainly not there and it sounds very funny when you try to say it. But why should it be there?

B. I guess I don't rightly know. I was just following the pattern when I put it in. You see, when you say yicha there seems to be a bit of the word, yi- that means "he" in some kind of way and the rest, -cha seems to have to do with crying. Likewise in nicha, ni- means "you" in some way and the rest is the same as before: -cha. So I figured that in yiʒchozh the yi- still means "he" and the rest, which is -ʒchozh, must mean 'eating greens'.

A. I see. And because yishcha means 'I am crying', you took the yish-, which is the part that means "I", and -ʒchozh, which means 'eating greens', and stuck them together to get that strange noise you produced.

B. That's exactly what I did.

A. So it looks as if this is a different pattern from the other one you learned. It's a new one to learn. Why don't you try and

guess how to say 'you are eating greens' (to more than one person).

B. I hardly dare. Following the old pattern I would say wohɬchozh.

A. That sounds strange too. It should be woɬchozh.

B. There's no h in it?

A. No. Your old pattern has led you astray again.

B. This language is going to be harder to learn than I thought. Please give me this new pattern again so I can learn it.

A. yishchozh
niɬchozh
yiɬchozh
woɬchozh

B. So we could make a rule that ɬ does not show up in the first person-singular form. (That is, in the form which means that the speaker is performing the action).

A. If you want to. But Navajo does not have any rules--it's not like those languages you learn at school, such as English or French. We just say whatever we mean but we don't have rules that tell us not to do this and that. But I suppose you can call that a rule if you want to. I suppose that for you, another rule would be that h doesn't show up before ɬ in the second-person dual form? (That is, in the form you use when speaking to two people to name the action they are performing).

B. Yes. I guess that would have to be a rule too. When I say "rule", by the way, I'm just trying to find some statement that I can remember easily that tells me where to pronounce the ɬ and where not to. Then I can still use the old pattern for these new verbs, and I don't have to learn a new one. That's because the new pattern only differs from the old one by leaving out something, the ɬ in certain places.

A. Well, I don't see much difference, Bill. But, if it makes you happy, then do it that way. Anyway, I've just thought of another verb that goes like that, I think. It's yiɬnaad 'he is licking it'. Can you guess the rest of the forms?

B. Let's see. It should go like this:

yishnaad
niɮnaad
yiɮnaad
woɮnaad

A. Good. And what about yiɮ'á 'he is ordering him'?

B. yish'á
niɮ'á
yiɮ'á
woɮ'á

A. You've got it. Let's look now at the perfective forms of these verbs, since you now know the imperfective forms. 'He ordered him' is yiyíiɮ'aad.

B. So following the old pattern, 'you ordered him' should be yíniɮ'aad, because in the perfective the part that means "you" seems to be yíní-, and from yiyíiɮ'aad it appears that the part that means "order" is -ɮ'aad. Putting them together we get yíniɮ'aad.

A. Excellent. How do you say 'I ordered him' now?

B. Let's see. In the perfective, the part that means "I" is yí-, as in yícha 'I cried', and we have a rule that says "leave out ɮ in a first-person singular form". So it should be yí'aad.

A. Well, I'm sorry, but your rule has gone wrong already. It should be yíɮ'aad.

B. Hm. That's a nuisance. So my rule only works in the imperfective. I have to restate it as: "Leave out ɮ in a first person singular imperfective form". Does that work for other verbs that follow this pattern? How do you say 'he licked it'?

A. yiyíiɮnáád.

B. And 'I licked it' is yíɮnáád?

A. Yes. So your rule is right now, because 'I am licking it', the first person singular imperfective form, is yishnaad, with no ł.

B. 'You licked it' will be yíniɮnáád and wooɮnáád, I suppose.

A. Yes, they are straightforward. Your rules do not say anything about them. In the perfective there is no h in the second person

dual form, for we say, as you learned earlier, woonii' for 'you heard about it' and not wohnii'. Therefore your second rule, which says "leave out h before ɬ in the second person dual form," is not relevant to this form, since there was no h to begin with.

B. Steady on! You're going too fast for me. You know my rules better than I do already! Just give me one more verb like these others to try out, if you can think of one.

A. Here, try yiɬchǫǫh 'he is spoiling it'. Just remember to leave out the ɬ and the h in the right places in the imperfective mode.

B. O.K. Here goes:

yishchǫǫh
niɬchǫǫh
yiɬchǫǫh
woɬchǫǫh

A. Good. And now the perfective. 'He spoiled it' is yiyííɬchǫ'.

B. yíɬchǫ'
yíníɬchǫ'
yiyííɬchǫ'
wooɬchǫ'

Now let me say once more what I've been trying to do, before I go, so that we both know what's happening. I'm trying to learn what look like two different patterns of verbs, one where a ɬ sometimes shows up, another where no ɬ ever shows up, and I'm pretending they really follow the same pattern. In fact, apart from knowing where to leave out the ɬ and the h, they do follow exactly the same pattern. So, I just learn one pattern and then have to learn two rules to tell me where to leave out the ɬ or the h. They are:

1. Leave out ɬ in the first person singular imperfective.
2. Leave out h before ɬ in the second person dual.

In rule 2 I don't have to say "second person dual imperfective" because there is no h to begin with in the second person dual perfective, so a less exact rule can't get me into trouble.

A. Well, it all seems very complicated to me. But it seems to work, and if it helps you, Bill, that's fine with me.

III. A few days after this, Bill comes for another lesson. But this time Akaƛii begins by talking about some things that he has noticed and that puzzle him.

A. Bill, I think I've found a new kind of verb for you. It has an l in it instead of a ƛ. For example, 'he is eating meat' is yilghaƛ, and 'you are eating meat' is nilghaƛ. How do you think we say 'I am eating meat'?

B. Well, let's see. My rule only talks about ƛ, telling me to leave it out in the first person singular imperfective. It says nothing about l, so I suppose you say yishghaƛ.

A. My goodness! You are good at pronouncing impossible things! No, we say yishghaƛ, so you have to change your rule to "Leave out ƛ or l in the first person singular imperfective".

B. O.K. And how do you say 'you are eating meat' in the dual? My rule tells me to leave out the h before ƛ in the second person dual, so I guess it is also left out before l. So I suppose it ought to be wolghaƛ.

A. Wrong again. It's woƛghaƛ, with ƛ not l. I told you this was a new kind of verb. Now I'm going to trick you a bit more with the perfective mode. 'You ate meat' is yíníłghał. How do you think we say 'he ate meat'?

B. That's unkind. If it follows the same pattern as the other verbs I've learned up to now that it should be yiyíłghał.

A. That's what I thought you'd say. But the correct answer is yoolghal. When there's an l in the verb, it follows a different pattern. And the first singular form is yishghal, not yilghal, as you might have expected. You see that the l disappears here too. And the second person dual form is wooƛghal.

B. So let me try and repeat this new pattern. It goes:

yishghal
yíníłghał
yoolghal
wooƛghal

Now we need some new rules. Firstly, "leave out l in the first person singular perfective" and secondly "change l to ƛ in the

second person dual perfective". We also need a rule to leave out the h and change ł to ɬ in the second person dual imperfective, to give woɬghaɬ instead of wolghaɬ or wohlghaɬ.

A. I hope you'll be able to remember your rules. They seem to me to be getting rather complicated. Here's something else to puzzle you. 'She is weaving it' is yitl'ǫ́, and it goes like the other verbs in the imperfective.

B. You mean:

yishtl'ǫ́
nitl'ǫ́
yitl'ǫ́
wohtl'ǫ́

A. Yes. But in the perfective it's different. 'I wove it' is sétl'ǫ́; 'you wove it' is sínítl'ǫ́.

B. Oh yes, I've read about that kind of perfective in my book. They call it the si-perfective, because of the s that shows up in it, and the other perfective I learned they call the yi-perfective.

A. Oh. So we'll call it the si-perfective too. Now, 'she wove it' is yiztl'ǫ́ and 'you wove it' in the dual is sootl'ǫ́.

B. It looks as if I'd better memorize this. It looks a bit similar to the other patterns but it would be hard to make rules to relate them to each other. So the pattern is:

sétl'ǫ́
sínítl'ǫ́
yiztl'ǫ́
sootl'ǫ́

A. Good. Now try one with a ɬ in it. 'You dried it up' is sínítɬgan. How do you say 'I dried it up'?

B. Let's see now. The part meaning "I" in the si-perfective is clearly sé- and the rest of the form is -ɬgan. Now I have a rule that says "Leave out ɬ in the first person singular imperfective", but it should be O.K. to leave it in here since this is a perfective form. I guess it should be séɬgan.

A. That's right. Very good. Now try 'he dried it up'.

B. The part meaning "he" in the si-perfective must be yiz-, as in yiz-tl'ǫ́. Now I have a feeling I should leave out the ɣ here, but I don't know why. I guess it'll be yizgan, and not yizɣgan.

A. Nearly right. You do leave out the ɣ, but you also have to change the z to s. It should be yisgan.

B. That means I need a rule: "Leave out ɣ and change z to s in the third singular si-perfective". Now, what's the second person dual form, 'you dried it'? I would guess it's sooɣgan.

A. Correct. You took soo-, the part meaning "you", and combined it with -ɣgan.

B. So the pattern is:

sézɣgan
sínízɣgan
yisgan
sooɣgan

A. Going back to the new rule you have just made, Bill, I am puzzled. Why do you want to change the z to s? Since all the other forms have an s, and not a z, the s seems more basic. Why not change the s to z where you need to?

B. You mean, to explain the difference between yiztl'ǫ́ with z and yisgan with s? But how do I know when to change the s to z? It only happens, doesn't it, in forms where I have to leave out the ɣ? You do not say yistɣ'ǫ́, because you also do not say sínízɣtl'ǫ́ -- it all hangs together in a pattern. The way you want me to say it seems more difficult--I would have to say "change s to z if no ɣ was left out". By putting both things into one rule, it's easier to show the connection between them.

A. Perhaps you're right. But I still think that s is more basic than z. I'll think about it some more before you come next time.

IV. Akaɣii was convinced that Bill's rules were wrong in some way and when Bill came again he had worked out something better.

A. Bill, let's look at your rules for telling you when to leave out ɣ and l again. What were they?

B. Let's see: 1. Leave out ɬ or l in the first singular imperfective. 2. Leave out l in the first singular perfective. 3. Leave out ɬ in the third singular si-perfective. They're correct aren't they? They give the right results, don't they?

A. Yes, but I think there's an easier way of saying them, so that you only need one rule instead of three. Look at the actual forms to which the rules apply: Rule 1 applies to give, for example, yishchǫǫh 'I am spoiling it' and yishghaɬ 'I am eating meat'. Rule 2 applies to give, for example, yishghal 'I ate meat', and Rule 3 applies to give, for example, yisgan 'he dried it'. Can you see anything strange about them?

B. Not really.

A. Well, in each case there's an s or sh after the yi. All you have to say is "leave out ɬ or l after s or sh". That always gives the right answer too, and it removes all that talk about imperfectives and perfectives.

B. Well, I don't know. It seems all right and it's certainly much simpler than my rules. But isn't it a bit risky? I mean my rule tells me exactly which forms don't have l or ɬ, but yours just works blindly whenever there's an s or sh. How do I know that won't give the wrong answer sometimes?

A. You don't. However, it does predict what should happen if we find a new kind of example; and that's just what you wanted when you first came to me. You were willing to take the risk of predicting things then, so you ought to be now.

B. That's true. Is there any way of testing your rule? Are there other verb forms that have s or sh in them in that position?

A. Yes. For instance, take yich'id again, "he is scratching it". The pattern of the future is like this:

deeshch'iɬ	'I will scratch it'
díích'iɬ	'you will scratch it'
yidooch'iɬ	'he will scratch it'
doohch'iɬ	'you two will scratch it'

Now, the third person singular future form of yiɬchǫǫh 'he is spoiling it' is yidooɬchǫǫɬ. What will the first person future form be?

B. Following your rule we get deeshchǫǫɮ--we have to leave out the ɮ after the sh. Is that right?

A. Yes, it is. And 'he will eat meat' is yidoolghaɮ. What is 'I will eat meat'?

B. By your rule, deeshghaɮ--we leave out the l after the sh.

A. Correct. Are you beginning to believe me?

B. Yes, of course. If I wanted to predict these forms using my kind of rule, I'd have to bring in another rule which said "Leave out ɮ or l in the first singular future form".

A. And there are other verb forms with sh in them, and in all of them you have to leave out ɮ or l. The rule works everywhere, I think, and it should help you a lot.

B. That's certainly true. Can we stop here a moment and see where we've got to? We have three kinds of verbs, according to whether they have ɮ, l, or nothing in the middle of them. We have two modes, imperfective and perfective, which are a bit like English present and past tenses respectively, and we have two kinds of perfective mode, which we have called yi- and si-perfectives. We are assuming that all the imperfectives show the same pattern. But we have:

yishchozh	yishghaɮ	yishk'ąąs
niɮchozh	nilghaɮ	ni_k'ąąs
yiɮchozh	yilghaɮ	yi_k'ąąs
woɮchozh	woɮghaɮ	woh_k'ąąs

And therefore we use your rule "Leave out ɮ or l after s or sh" to get the right forms for yishchozh and yishghaɮ. We also had a rule telling us to leave out h before ɮ and l in the second person person dual, and to change l to ɮ in that person. These rules are what allow us to treat the three patterns as essentially one pattern. Without them, I would have to learn three tantalizingly similar patterns as if they were completely different. The rules allow us to predict where the small differences will occur and what the differences will be.

A. Also, don't forget that in the yi-perfective we found at least two patterns, one occurred where the verb had l in the middle, the other where it had ɮ or nothing. For example:

yishghal		yiɣchozh	yí_k'ą́ą́z
yínílghal	but	yíníɣchozh	yíní_k'ą́ą́z
yoolghal		yiyííɣchozh	yiyíí_k'ą́ą́z
wooɣghal		wooɣchozh	woo_k'ą́ą́z

Even here we seem to be able to predict which particular pattern we get if we know which of l, ɣ, or nothing shows up in the middle. And my rule also predicts correctly that l will not show up in the middle of yishghal.

I cannot think of any verbs at the moment that have a si-perfective and an l in the middle of them, but our rules do work for those with ɣ or nothing, as in:

sé_tl'ǫ́		séɣgan
síní_tl'ǫ́	and	síníɣgan
yiz_tl'ǫ́		yis_gan
soo_tl'ǫ́		sooɣgan

B. We really seem to be getting somewhere now. We have reduced some of the patterns to one pattern and in other cases we know which pattern to choose, given that we know whether l, ɣ, or nothing appears in the middle of the verb. But now I have another question. All this time we have been forgetting to talk about the verb form that means 'we two', the first person dual. How is that form?

A. Let me tell you how to say 'we are crying': yiicha. And 'we are straightening it': yiik'ą́ą́s.

B. It looks as if the part that means 'we' is yii-. So 'we are eating meat' should be yii- plus -lghaɣ, that is: yiilghaɣ.

A. Quite correct.

B. And 'we are eating greens' should be yii- plus -ɣchozh, that is: yiiɣchozh.

A. Quite wrong.

B. What?! What's the matter with it?

A. It should be yiilchozh, with l, not ɣ.

B. But why? Is that a rule?

A. Bill, what a question to ask me! You seem to think that I am your French teacher with a book of rules hidden under my desk. We have to discover whether it is a rule. Before we go any further, let's state what the rule seems to be.

B. Well, I guess we have to say that the part meaning 'we' in the imperfective is yii-. It is added to verbs with l or nothing in the middle without change but when it is added to verbs with ɬ in the middle, the ɬ changes to l.

A. Now let's look at some other verbs that we know. Let's take the yi-perfective forms we've just talked about. 'We straightened it' is yiik'ą́ą́z and 'we ate meat' is yiilghal. Would you like to predict 'we ate greens'?

B. I suppose the ɬ is going to change to l again, so I'll guess yiilchozh.

A. That's right. By accident it comes out the same as 'we are eating greens', so yiilchozh has two meanings--it is ambiguous.

B. And the rule works here too, and the part meaning 'we' is still yii-. What happens in a si-perfective? How do you say 'we wove it'?

A. siitl'ǫ́. And 'we dried it' is siilgan. Again the ɬ that we find in, say, sé́ɬgan, has changed to l.

B. I don't think we'll be risking too much if we state a rule now: "In the first person dual form, leave out ɬ and replace it by l".

A. Why have you stated it like that? Why didn't you say: "In the first person dual, change ɬ to l"?

B. I don't know. Does it make any difference? We've been stating our rules like that all along--we said: "Leave out l or ɬ after s or sh", for instance.

A. Well, it just seems that ɬ and l are rather similar and it's easy to change one into the other.

B. Aren't you just talking about the way they're written? I know that ɬ is just l with a bar through it. But those are only letters. That doesn't mean that they're similar in sound, does it? They sound quite different to me. We mustn't get writing mixed up with speaking, you know.

A. Perhaps you're right. But it somehow doesn't seem too bad to say that ɬ changes to l. I don't know why. Let's leave it for now and think about it. I have to go now.

V. Bill arrives at the next lesson looking very unhappy.

B. You know our rule, the one you found, that says "leave out ł or ɬ after s or sh"? Well, it doesn't work. I've found an exception. What about yishɬeeh 'I am becoming'? There you have sh immediately followed by ɬ, and our rule says that the ɬ should be left out. Our rule predicts that you should say yisheeh.

A. That is bad. Perhaps this is just an exception, an irregular word that behaves differently from the others.

B. Well, that's possible, I suppose. What are the other forms of this verb?

A. The imperfective goes like this:

yishɬeeh
nileeh
yileeh
yiidleeh
wohɬeeh

B. Just a moment. This verb seems to have ł in the middle and not ɬ. However, our rule still should cause the ł to be left out in the first person singular. Instead we have ɬ.

A. And, do you remember we had a rule that said "leave out h before ɬ and ł in the second person dual, and change ł to ɬ"? The ł has changed to ɬ in wohɬeeh but the h is still there. So that's a second strange thing about these verbs. Furthermore there is dl instead of ł in the first person dual form.

B. What is the perfective form of this verb? Perhaps that will help us.

A. It has a si-perfective:

sél̨̨'
sínił̨̨'
sił̨̨'
siidł̨̨'
sooł̨̨'

B. That's rather odd, too. Why does it have sił̨̨' and not yisł̨̨' in the third person singular, for instance?

A. I don't know that either. There is another kind of third person which is jizł̨̨'. And the plural form of sił̨̨', meaning 'they are becoming' is daazł̨̨'. Both of them have z.

B. And as we noticed earlier, z is what you get in place of s in the third person of the si-perfective when there is neither l nor ɮ in the middle of the word. But here there is an l in the middle of the word, and so you'd expect jisɬɬ' and daasɬɬ'.

A. I have been thinking of other verbs, and there are others that are like this. For example, there is séloh 'I roped it' which goes like this:

séloh
sínílоh
yizloh
siidloh
sooloh

Notice that it too has z in the third person singular form. In the imperfective it shows a slightly different pattern from any other verb we have had so far, but it shows ɮ and dl and keeps h in the same places as yishɮeeh:

yiishɮoh
yiiloh
yiyiiloh
yiidloh
woohɮoh

B. It is interesting that the ɮ occurs next to sh and h only. Perhaps there's something bad about l next to sh and h in Navajo, so that you have to try and avoid having them next to each other. But that still doesn't tell us why the l or ɮ doesn't disappear altogether.

A. Let's take stock, and list what is strange about these verbs:

1. The ɮ is not left out after sh and s;
2. The h is not left out before the ɮ in the second person dual;
3. Some forms have ɮ, others have l;
4. The first person dual had dl; and
5. In the third person singular si-perfective one finds z, which is not found in other verbs with ɮ or l in the middle of them.

But now we seem to have reached a dead-end. There are perhaps some more rules that will help you here, but I don't know how to

find them. Fortunately for us, I've asked a Navajo friend of mine to come and help us today. He's called Saad Neiłkaahii and has studied many languages in addition to Navajo. Let's wait until he comes and ask him about this problem.

When Saad Neiłkaahii arrives they explain the difficulty and half expect him to produce a solution immediately. However, he insists on dividing the problem into smaller parts:

S.N. You have got into difficulties partly because you were talking about the problem in too imprecise a way and partly because you were not looking deep enough. Some of what you have discovered is good and we can build on it. Moreover, the way you have started thinking about rules is also good, though it too can be extended. But first let us examine the shape of the verb more closely and distinguish its parts more carefully. This will help us to talk about our problem more clearly. You see, one of your main problems arises because you have been talking about verbs with l, ł, or nothing "in the middle". It turns out that the expression "in the middle" is too vague; we have to talk more exactly. Does anything strike you as strange about the fact that ł and l are found in so many verbs?

B. Well, I had thought about that a little. I just assumed they were part of the verb, because they don't seem to do anything.

A. I suppose it's a bit strange that no other sounds occur there, except when sh, s, and h do.

SN Dead right--even though there are many sounds in Navajo, the only ones you ever find there are ł or l. Otherwise there's nothing. Why do we never find verbs like yimleeh or yigcha or yitk'ąąs? Perhaps that's because the ł and l really are separate elements, so that every verb contains either ł or l or nothing at a special position in the middle. This is the conclusion that linguists who have studies Navajo have come to. They have called these elements "classifiers", and talk about the ł-classifier, the l-classifier, and the zero-classifier. They also distinguish a d-classifier, which we will not talk about for a long time yet. In a moment we shall see more just-

ification for considering them separate elements. Incidentally, don't be fooled by the linguist's way of talking about a "zero classifier"--it just means that there's nothing in that position.

A. So now you have divided the verb into three parts, the part before the classifier, the classifier, and the part following the classifier.

SN That is correct. Now I will call the part following the classifier "the verb stem", or just "the stem", for short. It is the part that carries the real meaning of the verb, the part that tells you what action is being carried out or what state something or somebody is in. The part before the classifier we shall call for the time being "the person marker". This is not exact, because this part also may give information about tense and mode, but it is exact enough for what we need.

B. So we have the following overall pattern for the verb:

Person Marker + Classifier + Stem

Does that hold true for any verb in Navajo?

SN Yes. Extra parts may be added, but one can always find this basic pattern at the bottom of any verb. That is a rule too.

A. How do you know which classifier to use?

SN That seems to be something that one has to learn with each verb and so far nobody has discovered any way of predicting which verbs take which classifiers. Of course, it's possible that one of you will discover a way. However, there are examples of verbs that differ only in the fact that one has the ɣ-classifier and the other has the zero-classifier. You already talked about sé ɣgan. What does it mean, Bill?

B. 'I dried it'.

SN And what does ségan mean, Akaɣii?

A. 'I dried up'. It means nearly the same thing as sé ɣgan. But not quite. So the ɣ-classifier seems to change the meaning.

B. I don't get the difference.

SN The difference is that sé ɣgan is used when I have acted on something and caused it to become dry whereas ségan means that I myself have become dry. Linguists call the thing that is

acted upon "the object" of the verb. Verbs that have objects they call "transitive" and verbs without objects they call "intransitive". Thus ségan has no object--I did not act upon anything--and therefore it is an intransitive verb. Sɬgan has an object--I acted upon something and made it dry--and therefore it is a transitive verb.

A. So one of the things the ɬ-classifier does is make transitive verbs out of intransitive ones?

SN Yes. And it makes a transitive verb of a special kind that linguists call a "causative" verb, because its meaning seems to involve causing something to happen. Here are some other pairs of verbs to think about. In each pair the first verb is intransitive and the second is transitive--its causative partner. Notice how the meanings of the verbs are related:

	Intransitive		Transitive (Causative)	
Imperfective:	yibéézh	'it is boiling'	yiɬbéézh	'he is boiling it (causing it to boil)'
Perfective:	shibéézh	'it boiled'	yishbéézh	'he boiled it (caused it to boil)'
Imperfective:	nitsées	'it (fire) is going out'	yiniɬtsées	'he is putting it (fire) out (he is causing it to go out)'
Perfective:	neeztsiz	'it (fire) went out'	yineestsiz	'he put it (fire) out (he caused it to go out)'

B. But there is no ɬ-classifier in yineestsiz, is there?

SN That may be a deeper question than you think, Bill. We'll come back to it later. But how would you explain the s before the stem in yineestsiz? This example's a bit unfair because it's a more complicated verb than the others you have talked about so far, but I'll give you a hint: it's a disguised si-perfective.

A. So the s arises by our old rule which said "leave out ɬ or l after s or sh". I see you could say that you get s in the si-perfective where you'd expect an ɬ or l classifier and you get

ẓ where you expect a zero-classifier. We had a special rule for that too, but it's easier to talk about it now. And we know that other forms have a ɣ-classifier, for we say néɣtsiz for 'I put it out'.

B. Could I ask a stupid question at this point? When you put this classifier in, does it appear everywhere in the verb, except where our rules tell you to leave it out? I mean, does it appear in all the modes and all the tenses, like the future and whatever else there is?

SN Yes, it's always there, in every form of the verb. If you once make a causative verb by putting in ɣ, then that ɣ has to appear everywhere except, as you say, where rules like yours say "leave it out". The same is true of the ł-classifier.

A. So your formula, which says that a verb has a basic shape in Navajo of:

Person Marker + Classifier + Stem

is true for every form of every verb, unless a rule tells you to leave out the classifier?

SN For the time being, I'll agree with you, though later I want to change that statement a little. Let me give you another couple of verb pairs:

Imperfective:	yiitsxóóh	'it is becoming yellow'	yiyiiɣtsxóóh	'he is making it yellow (causing it to become yellow)'
Perfective:	yiitsxoi	'it became yellow'	yiyiiɣtsxoi	'he made it yellow (caused it to become yellow)'
Imperfective:	niteeh	'he is lying down'	yiniɣteeh	'he is laying it down (causing it to lie down)'
Perfective:	neeztɬ	'he lay down'	yineestɬ	'he laid it down (caused it to lie down)'

B. What is the extra yi- at the beginning of all the transitive forms? It doesn't appear in the intransitive ones. Is it incorrect to say yiyiitsxóóh or yiniteeh?

A. Yes, that sounds terrible, doesn't it. I think the yi stands for the object, the thing that is being affected by the verb.

SN That is correct, though I don't want to go into it just now. All you need to know for now, Bill, is that a transitive verb in Navajo has to have a marker of the object in the verb if the subject is in the third person. That marker is yi (or sometimes bi) if the object is also in the third person. Do not worry about that--it is not dependent on the classifier in any direct way and we can ignore it at present.

B. O.K. At any rate, you've convinced me that the classifier really has to be treated as a separate part of the verb, though I'd have been more skeptical if you hadn't shown us these verbs that differ only by the presence or absence of an ɬ-classifier.

SN You are right to be skeptical, Bill. The function of the classifier is still very mysterious, and it often seems wrong to think of it as having its own "meaning", in the way that a stem has a meaning. Nevertheless, we will see that we can find order in what is otherwise a chaos if we do consider it a separate part of the verb, and a part that is present throughout all modes and tenses of the verb. What I want you to keep in mind from now on is the distinction between the classifier and the stem. That will be important in the discussion of yishɬeeh and so on later. Now I want to go on to a different subject, and talk about some simple properties of speech sounds that we will need. First, do you know the difference between vowels and consonants?

B. Well, vaguely. Vowels are letters like a, e, i, o, and all the rest are consonants.

SN Not quite, Bill. We aren't talking about letters here, but about sounds. Roughly speaking, vowels are speech sounds that are pronounced with a fairly wide open mouth, so that air can pass through freely without being stopped or hindered in any way. Consonants are sounds that are produced when the air passage is

blocked off completely and then released, or when the air passage is made very narrow so that a hissing, buzzing, or scraping kind of sound is produced. Examples of vowels are the sounds i and a in nicha, or the oo and ɬɬ in wook'ɬɬz. At present we are more interested in consonants. The consonants in those words are n, ch, w, k', and z.

A. Let me try and say what the consonants are in yiniɣteeh. I think they are n, ɣ, t, and h. I'm not sure about y.

SN It's true that y and w are a kind of halfway house between vowels and consonants and we could talk about that at great length. We'll just pretend they are consonants, but it won't matter much for what we will be discussing. As long as you get the idea of what kind of sounds consonants are, that is good enough for now. You see that the division vowel-consonant divides all speech sounds into two groups and every speech sound belongs to one group or the other. We can divide up all speech sounds into two groups in other ways. The vowel-consonant division depended on whether the mouth was fairly wide open or not. We can also divide speech sounds into two groups depending on whether there is a complete closure in the mouth or not. When you pronounce t, tl', m, or g, for example, the air passage through the mouth is completely blocked for a moment. These sounds are called "stops", because the air passage through the mouth is stopped up for a moment. All other sounds are called "continuants", because the air can continue out of the mouth while they are being pronounced. All vowels are also continuants, and, in addition, consonants like s, z, l, gh, and y are continuants.

B. So when you hiss, by saying "ssss!", you can keep it going for a long time because s is a continuant.

SN Yes, you can do that with all continuant consonants. In English you also say "shshshsh!" to quieten someone, to "hush" them up (cf. Young and Morgan, The Navajo Language, p. 246).

A. In Navajo we have some words like that too--like ɣɣɣɣɣ. But what about n or m--you can hold that for a long time but you said it was a stop.

SN That is true--after all, humming is really just holding an m for a long time and adding a tune to it. That is because in m and n the air escapes through the nose and not through the mouth. In the mouth there is a complete block and because of this, I called m and n stops. Some linguists would not agree, but we do not need to quarrel over names and definitions and for Navajo it is simplest to count m and n as non-continuant consonants.

We just need to talk about one other matter before we return to more interesting things. If we examine the continuant consonants of Navajo we find that most of them come in pairs. The pairs that I am thinking of are these:

s	z
sh	zh
ɣ	l
x	gh

Now I want you to do an experiment with me. First put your hands tight over your ears and then say sssss followed by zzzzz. Like this: sssss zzzzz sssss zzzzz and so on. Try it and tell me what you hear.

A. sssss zzzzz sssss zzzzz. When I say sssss I can hear very little but when I say zzzzz my whole head seems to be buzzing and shaking.

B. You can say both sssss and zzzzz without moving anything in your mouth. You can just switch from one to the other without stopping or moving your jaw.

SN Now try sh and zh in the same way.

A. zh is almost deafening and you don't have to move anything when you change to sh.

SN Now repeat sh, zh, but instead of putting your hands over your ears, put the fingers of one hand on your adam's apple. Now what happens?

B. You can feel your throat vibrating when you say zh. When you say sh you can't feel anything.

SN Very good. When you go home, try out the same two experiments for the pairs ɬ, l and x, gh. The loud buzzing sound is called, as a technical term, "voiced", and speech sounds that are pronounced in this way are called "voiced" sounds. Sounds that are produced without voice are called "voiceless" sounds. Thus z, zh, l and gh are voiced sounds and s, sh, ɬ and x are voiceless sounds. In Navajo all vowels are voiced sounds too. Notice that you can sing or "hum" a tune using a voiced continuant, whereas with a voiceless continuant the best you can do is a kind of whistle. In fact, normal whistling is a special kind of voiceless continuant, but it is not used as a speech sound.

Now we have three kinds of labels we can attach to speech sounds; we can ask of any given speech sound: is it a vowel or a consonant?; is it a stop or a continuant?; is it voiced or voiceless? Akaɬii, what would you say about s?

A. It is a consonant, because the mouth is closed sufficiently to cause friction; it is a continuant, because the air stream in the mouth is not completely blocked off; and it is voiceless, because you don't hear the buzz or feel the vibrations when you try the two experiments.

SN Very good. So s is a voiceless continuant consonant. But we have talked for too long now. I want you to remember three things, then we can get down to your problem straight away when we meet again. Firstly, remember the basic structure of the verb:

Person Marker + Classifier + Stem

There are probably four classifiers, and we have talked about three of them: zero, ɬ and l. Secondly, the classifier remains throughout all the different modes and tenses of the same verb. Thirdly, remember the distinctions: vowel versus consonant: stop versus continuant; voiced versus voiceless. Think about the sounds of Navajo and see if you can classify them according to these three pairs of distinctions. Next time we will use this new knowledge.

TO BE CONTINUED

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